

WEST Search History

DATE: Friday, December 03, 2004

<u>Hide?</u>	<u>Set Name Query</u>	<u>Hit Count</u>
	<i>DB=PGPB; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L17 saxatilis not morone	6
	<i>DB=USOC; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L16 saxatilis not morone	0
	<i>DB=EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L15 saxatilis not morone	8
	<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L14 113 not morone	3
<input type="checkbox"/>	L13 saxatilis	19
<input type="checkbox"/>	L12 110 same saxatilis	0
<input type="checkbox"/>	L11 19 same L10	87
<input type="checkbox"/>	L10 venom	4399
<input type="checkbox"/>	L9 disintegrin	224
<input type="checkbox"/>	L8 saxatilis same (agkistrodon or gloydias)	0
	<i>DB=USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L7 saxatilis same (agkistrodon or gloydias)	6
	<i>DB=PGPB; PLUR=YES; OP=ADJ</i>	
<input checked="" type="checkbox"/>	L4 saxatilis same (agkistrodon or gloydias)	0
<input type="checkbox"/>	L3 saxitilis same (agkistrodon or gloydias)	0
	<i>DB=USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L2 saxitilis same (agkistrodon or gloydias)	0
	<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L1 saxitilis same (agkistrodon or gloydias)	0

END OF SEARCH HISTORY

File 411:DIALINDEX(R) (c) 2004 The Dialog Corporation
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Your SELECT statement is:
s saxatilis

Your SELECT statement is:
S SAXATILIS AND (VENOM OR TOXIN OR NEUROTOX1?)

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s saxatilis and (venom or toxin or neurotoxin)

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Ref	Items	File
Ref	Items	File
N1	2474 5 Biosis Preview(R)_1969-2004 Nov W3	N1 34 5 Biosis Preview(R)_1969-2004 Nov W3
N2	1739 185: Zoological Record Online(R)_1978-2004/Oct	N2 14 440 Current Contents Search(R)_1990-2004/Dec 03
N3	1613 440: Current Contents Search(R)_1990-2004/Dec 03	N3 13 349 PCT FULLTEXT_1979-2002/JB=20041202,UT=20041125
N4	1312 34: SciSearch(R) Cited Ref Sci_1990-2004/Nov W4	N4 8 399: CA SEARCH(R)_1967-2004/ID=14123
N5	669 144: Pascal_1973-2004/Nov W3	N5 8 654: US Pat Full_1976-2004/Nov 30
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N7	696 399: CA SEARCH(R)_1967-2004/ID=14123	N7 7 390: Beilstein Facts_July 2004
N8	542 71: ELSEVIER BIOBASE_1994-2004/Nov W3	N8 6 155: MEDLINE(R)_1951-2004/Nov W4
N9	513 292: GEOBASE(TM)_1980-2004/Oct B3	N9 5 34: SciSearch(R) Cited Ref Sci_1990-2004/Nov W4
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N11	77 files have one or more items; file list includes 254 files.	N11 5 144: Pascal_1973-2004/Nov W3
		26/11 (Item 11 from file: 5) 0010123089 BIOSIS NO.: 199698590922 Dispersal and population expansion in a direct developing marine snail (<i>Littorina saxatilis</i>) following a severe population bottleneck 1995
		26/12 (Item 12 from file: 5) 0003619569 BIOSIS NO.: 198274035982 EFFECT OF MICROBIAL VENOM PROTEINASE INHIBITORY SUBSTANCE ON SOME ENZYMES IN SNAKE VENOMS 1981
		26/13 (Item 13 from file: 5) 004727438 BIOSIS NO.: 198580036333 EFFECTS OF VENOMS FROM KOREAN AGKISTRODON SNAKES ON BASIC HEMATOLOGIC FINDINGS IN MICE 1984
		26/14 (Item 14 from file: 5) 0013539753 BIOSIS NO.: 20020133264 Effects of safty on alecarb toxicity in juvenile rainbow trout (<i>Oncorhynchus mykiss</i>) and striped bass (<i>Morone saxatilis</i> X <i>chrysops</i>) 2001
		26/15 (Item 15 from file: 5) 0002038118 BIOSIS NO.: 197713064110 EXPERIMENTAL STUDIES ON KOREAN SNAKE VENOMS 1976
		26/16 (Item 16 from file: 5) 0014016125 BIOSIS NO.: 20020069936 Estrogenic responses of larva sunshine bass (<i>Morone saxatilis</i> X M. <i>chrysops</i>) exposed to New York city sewage effluent 2002
		26/17 (Item 17 from file: 5) 0008791082 BIOSIS NO.: 199395093348 Fibrinolytic and coagulation activities of Korean snake venoms 1992
		26/18 (Item 18 from file: 5) 0014140809 BIOSIS NO.: 200300667228 Fishing along the Clinch River arm of Watts Bar Reservoir adjacent to the Oak Ridge Reservation, Tennessee: Behavior, knowledge and risk perception. 2002
		26/19 (Item 19 from file: 5) 0007697089 BIOSIS NO.: 19910194 Fish lesions in the Chesapeake Bay: Pesticide-like dinitrophenates and other etiologies. May 1998
		26/20 (Item 20 from file: 5) 0014161477 BIOSIS NO.: 20030130196 Fish tissue quality in the lower Mississippi River and health risks from fish consumption. 2003
		26/21 (Item 21 from file: 5) 0012597242 BIOSIS NO.: 20000415555 Glutathione-dependent biotransformation of 1-chloro-2,4-dinitrobenzenes in arterial and venous blood of the striped bass (<i>Morone saxatilis</i>) 2000
		26/22 (Item 22 from file: 5) 0007697089 BIOSIS NO.: 199102001 PMID: 9601194 HISTOPATHOLOGICAL OBSERVATIONS ON THE EFFECTS OF AGKISTRODON SNAKE VENOM IN ADRENAL GLANDS OF RAT 1990
		26/23 (Item 23 from file: 5) 00055728810 BIOSIS NO.: 198784082959 HISTOPATHOLOGICAL STUDIES ON THE HEART OF RAT INTOXICATED WITH THE VENOMS OF AGKISTRODON SNAKES 1986
		26/24 (Item 24 from file: 5) 0005065106 BIOSIS NO.: 198681028897 HISTOPATHOLOGICAL STUDIES ON THE EARLY SKIN INJURY BY ENVENOMATION WITH THE KOREAN AGKISTRODON SNAKES 198
		26/25 (Item 25 from file: 5) 0014821494 BIOSIS NO.: 200400214951 Identification of euglenoid algae that produce ichthyotoxin(s), 2004
		26/26 (Item 26 from file: 5) 00100527295 BIOSIS NO.: 199699161356 Differential effects of brevetoxin and beta-naphthoflavone on xenobiotic metabolizing enzymes in striped bass (<i>Morone saxatilis</i>) 1996

Molecular evolution and structure-function relationships of crototoxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms. Jul 1 2004

26/627 (Item 27 from file: 5) 0014933929 BIOSIS NO.: 200406364718
Molecular evolution and structure-function relationships of crototoxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms 2004
NEUROTOXINS FROM THE VENOMS OF CROTALID SNAKES COLLECTED IN CHINA BOOK TITLE: MATSUI, M., T. HIKIDA AND R. C. GORIS
(ED.), CURRENT HERPETOLOGY IN EAST ASIA: SECOND JAPAN-CHINA HERPETOLOGICAL SYMPOSIUM, KYOTO, JAPAN, JULY 1988.
IX+521P. HERPETOLOGICAL SOCIETY OF JAPAN; KYOTO, JAPAN, ILLUS. MAPS 1989

26/628 (Item 28 from file: 5) 0006879482 BIOSIS NO.: 199038057373
Neutralization of Agkistrodon saxatilis (Gloydius saxatilis) venom with OotAb(R) in a murine model 1999

26/629 (Item 29 from file: 5) 0012234776 BIOSIS NO.: 199900494436
The Novel Angiogenic Inhibitor Saxatilin Reduces Ocular Neovascularization Elicited by bFGF and Hyperoxia. 2002

26/631 (Item 31 from file: 5) 0014770613 BIOSIS NO.: 200400137967
Purification, cDNA cloning and sequence analysis of thrombin-like enzyme from Gloydius saxatilis . 2003

26/632 (Item 32 from file: 5) 0005739597 BIOSIS NO.: 198734093746
PATHOLOGICAL STUDIES ON THE EFFECTS OF VENOM OF AGKISTRODON SAXATILIS IN THE HEART OF RATS 1987

26/633 (Item 33 from file: 5) 0014206479 BIOSIS NO.: 197886073847
SNAKE BITES IN SOUTH KOREA 1978

26/634 (Item 34 from file: 155) 11691720 PMID: 11864711
Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration. Jan 1 2002

26/635 (Item 35 from file: 5) 0013636201 BIOSIS NO.: 200200229712
Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration 2002

26/636 (Item 36 from file: 5) 0012638509 BIOSIS NO.: 200000366822
Suppression of superoxide production by chlorothalonil in striped bass (Morone saxatilis) macrophages: The role of cellular sulfhydryls and oxidative stress 2000

26/637 (Item 37 from file: 5) 0012574270 BIOSIS NO.: 200000292563
A survey of site-specific mercury concentrations in game fish from Maryland fresh and estuarine waters 2000

26/638 (Item 38 from file: 155) 12594532 PMID: 7708692
Strong natural selection causes microscale allozyme variation in a marine snail. Mar 28 1995

26/639 (Item 39 from file: 5) 0009786436 BIOSIS NO.: 19959826269
Strong natural selection causes microscale allozyme variation in a marine snail 1995

26/640 (Item 40 from file: 5) 0014918052 BIOSIS NO.: 200400228809
Tolerance to heavy metals in Littorina saxatilis from a metal contaminated estuary in the Isle of Man. 2004

26/641 (Item 41 from file: 349) 01180129 **Image available**
DINOFLAGELLATE KARLOTOXINS. METHODS OF ISOLATION AND USES THEREOF KARLOTOXINES DINOFLAGELLES. PROCEDES DISOLATION ET UTILISATIONS DE CES DERNIERES Publication Language: English Filing Language: English Filing
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METHODS AND COMPOSITIONS FOR PRODUCTION OF RECOMBINANT PEPTIDES PROCEDES ET COMPOSITIONS DE PRODUCTION DE PEPTIDES RECOMBINANTS Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 18947 Publication Year: 2003

26/643 (Item 43 from file: 349) 01025554
NOVEL NUCLEIC ACIDS AND POLYPEPTIDES NOUVEAUX ACIDES NUCLÉIQUES ET POLYPEPTIDES Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 324318 Publication Year: 2003

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26/645 (Item 45 from file: 349) 00931754
FEED ADDITIVE COMPOSITIONS AND METHODS COMPOSITIONS D'ADDITIF ALIMENTAIRE ET METHODES ASSOCIES Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 37802 Publication Year: 2002

26/646 (Item 46 from file: 349) 00806522 **Image available**
NOVEL PROTEIN DERIVED FROM AGKISTRODON SAXATILIS EMELIANOV AND PROCESS FOR PREPARING THE SAME NOUVEL PROTEINE DERIVÉE DAGKISTRODON SAXATILIS EMELIANOV ET SON PROCÈDE DE PRÉPARATION Publication Language: English Filing Language: Korean Fulltext Availability: Detailed Description Claims Fulltext Word Count: 6537 Publication Year: 2002

26/647 (Item 47 from file: 349) 008628281
THERAPEUTIC AGENTS - II AGENTS THÉRAPEUTIQUES - II Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 38630 Publication Year: 2001

26/648 (Item 48 from file: 349) 0086280
THERAPEUTIC AGENTS - I AGENTS THÉRAPEUTIQUES - I Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 48640 Publication Year: 2001

26/649 (Item 49 from file: 349) 00862079
THERAPEUTIC AGENTS - III AGENTS THÉRAPEUTIQUES - III Publication Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 41482 Publication Year: 2001

26/650 (Item 50 from file: 349) 00834529
HUMAN GENES AND GENE EXPRESSION PRODUCTS NOUVEAUX GENES HUMAINS ET LEURS PRODUITS D'EXPRESSEION Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 182260 Publication Year: 2

26/651 (Item 51 from file: 349) 00824983
HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF GENE EXPRESSION IN HUMAN HEA SONDES D'ACIDE NUCLÉIQUE A UN SEUL EXON DÉRIVÉES DU GENOME HUMAIN UTILES POUR ANALYSER L'EXPRESSEION GENIQUE DANS LE COEUR HUMAIN Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 255847 Publication Year: 2001

26/652 (Item 52 from file: 349) 00824982
HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF GENE EXPRESSION IN HUMAN ADU LIVER SONDES D'ACIDE NUCLÉIQUE A UN SEUL EXON DÉRIVÉES DU GENOME HUMAIN UTILES POUR ANALYSER L'EXPRESSEION GENIQUE DANS LE FOIE ADULTE HUMAIN Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 35336 Publication Year: 2001

26/653 (Item 53 from file: 349) 00824980
HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF GENE EXPRESSION IN HUMAN BRE AND BT 474 CELLS SONDES D'ACIDE NUCLÉIQUE A UN SEUL EXON DÉRIVÉES DU GENOME HUMAIN UTILES POUR ANALYSER L'EXPRESSEION GENIQUE DANS CELLES DES CELLES BT 474 Publication Language: English Filing Language: English Filing Availability: Detailed Description Claims Fulltext Word Count: 153718 Publication Year: 2001

26/654 (Item 3 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv. 1089273 PMID: 11024465
Biochemical characterization of a thrombin-like enzyme and a fibrinolytic serine protease from snake (Agkistrodon sawatilis) venom Koh Y S; Chung K H; Kim D S Department of Biochemistry, College of Science and Bioproducts Research Center, Yonsei University, Seoul, South Korea. Toxicon - official journal of the International Society on Toxicology (ENGLAND) Apr 2001; 39 (4) p555-560 ISSN 0041-0101 Journal Code: 1307333 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NL Record type: Completed

A thrombin-like enzyme and a fibrinolytic serine protease were purified to homogeneity from the venom of a Korean snake Agkistrodon sawatilis emelianov. Both the purified enzymes migrated as a single protein band corresponding to 39 kDa in SDS PAGE. However, the molecular mass was reduced to 28 kDa by enzymatic removal of the N-linked carbohydrates in those two different enzyme species. Although the thrombin-like enzyme and the fibrinolytic protease show homologous features in their molecular sizes and N-terminal amino acid sequences, yet they can be clearly distinguished from each other in terms of substrate specificity, susceptibility to inhibitors and fibrinogen degradation. It is postulated that these two enzymes are capable of functioning in a cooperative manner to effectively remove fibrinogen and consequently to reduce the blood viscosity. Record D Created: 200001130 Record Date Completed: 200001130

26/655 (Item 6 from file: 5) DIALOG(R)File 5: Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv. 0001926357 BIOSIS NO.: 19762023096 CLINICAL ANALYSIS ON VENOMOUS SNAKE BITES IN KOREA AUTHOR: NAH K Y JOURNAL: Journal of the Korean Surgical Society 17 (3): p199-208 1975 DOCUMENT TYPE: Article RECORD TYPE: Citation LANGUAGE: Unspecified

26/656 (Item 7 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv. 06512337 PMID: 6420095 Cl specification of Agkistrodon species in Chin

The wide geographical distribution of Agkistrodon and the slight morphological differences among the snakes of the genus Agkistrodon in China have posed a problem to taxonomists. We have employed polyacrylamide gel electrophoresis and immunological diffusion techniques for comparison of the venoms of different species and subspecies of Agkistrodon from various localities. The electrophoretic patterns of the proteins of the venoms were different from each other, but showed certain relations within species and subspecies. We used Ouchterlony double diffusion of a rabbit antiserum against the purified "neurotoxin" from the venom of Agkistrodon blomhoffii brevicaudus (from the Zhejiang Province of China) on the various venoms of Agkistrodon. Precipitin lines formed with immunological identity between the same species, partial identity between closely related species and no precipitin line between different species. Combining experimental data, morphological characteristics and geographical distribution, we propose that the genus Agkistrodon (sensu stricto) in China consists of seven species and subspecies: (1) Agkistrodon blomhoffii brevicaudus Stejneger, (2) A. b. ussuricus Emeljanov, (3) A. infernus (Strauch), (4) A. saxatilis Emeljanov, (5) A. schiedaeensis Zhao, (6) A. strauchi Bedriaga, (7) A. monticola Werner. Agkistrodon acutus (Guenther) has recently been changed to a new genus, Deinagkistrodon, established by Gloyd in 1978. Record Date Created: 19840530 Record Date Completed: 19840530

27/12 (Item 12 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0003619559 BIOSIS NO.: 198274035982 EFFECT OF MICROBIAL VENOM PROTEINASE INHIBITORY SUBSTANCE ON SOME ENZYMES IN SNAKE VENOMS

AUTHOR: SEU J H (Reprint); SAWAI Y

AUTHOR ADDRESS: DEP OF CHEM, AGRIC COLLEGE, KYUNGPOOK NATIONAL UNIV., TAEGU, KOREA**KOREA
JOURNAL: Snake 13 (1): p38-41 1981 ISSN: 0386-3425 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: ENGLISH

ABSTRACT: An inhibitory substance against proteinase activity of snake venoms (ISV) had a potent inhibitory effect of proteinase activity of venoms of *Trimeresurus flavoviridis*, *T. elegans*, *T. okavarensis*, *T. mucrosquamatus*, *T. stejnegeri*, *Agkistrodon blomhoffii*, *A. bicolor*, *A. s. s. s.*, *A. concolor*, *Bitis arietans* and *Vipera russelli*. Proteolytic activity of venom of *T. flavoviridis* on Azocoll was also completely inhibited by ISV. L-amino acid oxidase of the venom was not inhibited. Proteinase activity of venom of *T. flavoviridis* could be separated into 2 fractions by ISV, one was inactivated irreversibly with precipitation and the other was inactivated reversibly without precipitation.

27/13 (Item 13 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0004727438 BIOSIS NO.: 198580036333 EFFECTS OF VENOMS FROM KOREAN AGKISTRODON SNAKES ON BASIC HEMATOLOGIC FINDINGS IN MICE

AUTHOR: UM J H (Reprint); KIM H C; SONG K Y

AUTHOR ADDRESS: DEP PATHOLOGY, COLLEGE MED, CHUNG-ANG UNIV., SEOUL 151, KOREA**KOREA
JOURNAL: Chung-Ang Journal of Medicine 9 (4): p525-530 1984 ISSN: 0253-6250 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: KOREAN

ABSTRACT: A. brevicaudus brevicaudus, A. caliginosus and A. s. s. s. venoms were injected s.c. into mice (0.37 mg, 0.21 mg and 0.30 mg) after which hematological studies were carried out. Mice were sacrificed at 5 min, 15 min, 30 min, 1 h, 3 h, 6 h, 5 days and 7 days. Each group consisted of 5 mice. Basic hematologic examinations included WBC (white blood cells), RBC (red blood cells) and Hb, MCV (mean cell volume) RDW (RBC distribution width) and platelets. The effects of A. b. brevicaudus venom indicated that changes of WBC were not significant. RBC were increased at an early stage but progressively decreased to 5.3 +. 1.8 (times, 1012/l). Hb showed a similar pattern with RBC. MCV was slightly decreased to 50.7 fl. RDW were within normal limits. Platelets markedly and progressively decreased to 114.4 +. 40.9 (times, 109/l). The effects of A. caliginosus venom showed that changes of WBC were not significant. RBC progressively decreased to 5.8 +. 0.2 (times, 1012/l). Hb showed similar pattern with RBC. MCV decreased to 49.3 +. 114.5 (times, 109/l). The effects of A. s. s. s. venom indicated that changes of WBC were not significant. RBC progressively decreased to 4.4 +. 0.4 (times, 1012/l). Hb showed similar pattern with RBC. MCV increased later. RDW were within normal limits. Platelets markedly and progressively decreased to 40.2 +. 13.8 (times, 109/l). Venoms from Korean Agkistrodon snakes showed similar basic hematologic effects in the blood of mice by marked decrease of RBC and platelets. The hemotoxic effects were most severe in A. s. s. s., A. b. brevicaudus and mild in A. caliginosus.

27/14 (Item 14 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0002038118 BIOSIS NO.: 19771304110 EXPERIMENTAL STUDIES ON KOREAN SNAKE VENOMS

AUTHOR: KIM W-J; AHN Y S; KIM J D; KIM S W; HONG S S

JOURNAL: Korean Journal of Pharmacology 12 (2): p115-123 1976 ISSN: 0377-9459 DOCUMENT TYPE: Article RECORD TYPE: Citation LANGUAGE: Unspecified

27/15 (Item 15 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0002038118 BIOSIS NO.: 199395093348

EXPERIMENTAL STUDIES ON KOREAN SNAKE VENOMS
AUTHOR: KIM W-J; AHN Y S; KIM J D; KIM S W; HONG S S
JOURNAL: Korean Journal of Pharmacology 12 (2): p115-123 1976 ISSN: 0377-9459 DOCUMENT TYPE: Article
RECORD TYPE: Citation LANGUAGE: Unspecified

RECORD TYPE: Abstract LANGUAGE: English
ABSTRACT: The action of snake venoms from 3 different kinds of Korean venomous species (Agkistrodon halys brevicaudus, Agkistrodon s. s. s. and Agkistrodon ussuricus) on the haemostasis and fibrinolytic system was studied and compared with other two venoms of Agkistrodon rhodostoma, Malayan Pit Viper and Agkistrodon halys blomhoffi, Japanese Mamushi. The coagula activity, fibrinolytic, fibrinogenolytic, and amidolytic activity were determined. Fibrinogen clotting activity in the venoms of Agkistrodon s. s. s. and Agkistrodon ussuricus were 1.0 and 3.5 NH U/mg. However, it was not able to detect the fibrinogen clotting activity from the venom of Agkistrodon halys (Korean Salmona) during prolonged incubation. Polyacrylamide gel electrophoretic patterns of these venoms were quite different from each other. After removal of SDS from the gel with Triton X 100, the fibrinolytic activities in the gel could be directly detected by the fibrin-agar zymographic assay method. The venom of Agkistrodon halys has shown at least two distinct fibrinolytic enzymes (51 Kd and 33 Kd). Agkistrodon s. s. s. has three (47 Kd, 33 Kd, and 28 Kd), and Agkistrodon caliginosus has two (38 Kd and 33 Kd). No plasminogen activation activity was observed any of the venoms of Korean poisonous snakes.

27/12 (Item 22 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0007697088 BIOSIS NO.: 19919379980 HISTOPATHOLOGICAL OBSERVATIONS ON THE EFFECTS OF AGKISTRODON SNAKE VENOM IN ADRENAL GLAND OF RAT

AUTHOR: LEE M J (Reprint); PARK E S; PARK Y W; JAE J H; SONG K Y

AUTHOR ADDRESS: DEP PATHOL, COLL MED, CHUNG-ANG UNIV., SEOUL 156-756, KOREA **KOREA
JOURNAL: Chung-Ang Journal of Medicine 15 (2): p155-164 1990 ISSN: 0253-6250 DOCUMENT TYPE: Article

RECORD TYPE: Abstract LANGUAGE: KOREAN
ABSTRACT: To observe the histological effects on the adrenal glands by the venoms of Agkistrodon snakes in Korea, freeze d venom was administered to the rats with weight ranged 200-250gm. Each venom of A. b. brevicaudus (44mg), A. caliginosus (40mg) and A. s. s. s. (42mg) was dissolved in 12 ml of normal saline, respectively and 0.4ml of which were administered through the tail vein of the each rat. Histopathological observations on the adrenal glands were done sequentially with time interval after venom administration at 1 hr, 3 hrs, 6 hrs, 24 hrs, 4 days and 7 days, respectively. The results were as follows. 1. In A. b. brevicaudus intoxication, 15 out of 52 rats (28.8%) were dead and revealed diffuse congestion in 11, focal hemorrhage in 5 and focal necrosis in 2 among them. In 1 to 6 hours were noted 10 diffuse congestion among 19 rats and focal hemorrhage in 2, diffuse hemorrhage in 2, and focal or diffuse necrosis in 3. In 24 hours were noted 3 focal necrosis in 7 rats. Only mild conges was noted in 4 to 7 days. 2. In A. caliginosus intoxication, 8 out of 57 rats (14.7%) were dead and revealed diffuse congestion focal hemorrhage in 4 and focal necrosis in 2 among them. In 1 to 6 hours were noted 6 diffuse congestion among 21 rats, an focal hemorrhage in 2. In 24 hours, were noted diffuse congestion in 4 and focal necrosis in 1 among 10 rats. Diffuse congesti in 1 was noted among 18 rats in 4 to 7 days. 3. In A. s. s. s. intoxication, 8 out 50 rats (16%) were dead and revealed diffuse congestion in 7, focal hemorrhage in 1 and focal necrosis in 1 among them. In 1 to 6 hours were noted diffuse congestion in 8 focal necrosis in 3 and diffuse necrosis in 1 among 25 rats. In 24 hours diffuse congestion in 1 and focal necrosis in 3 among rats. Diffuse congestion in 2 among 10 rats in 4 to 7 days. Therefore, it was suggested that all three kinds of Agkistrodon snake venom in Korea could induce diffuse congestion, hemorrhage and/or necrosis in adrenal glands by its hemotoxic character of venom.

27/13 (Item 23 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0005728810 BIOSIS NO.: 19878402939 HISTOPATHOLOGICAL STUDIES ON THE HEART OF RAT INTOXICATED WITH THE VENOMS OF AGKISTRODON SNAKE

AUTHOR: LEE J H (Reprint); YOO J H; SONG K Y

AUTHOR ADDRESS: DEP PATHOL, COLL MED, CHUNG-ANG UNIV., SEOUL 151, KOREA** KOREA
JOURNAL: Chung-Ang Journal of Medicine 11 (4): p269-282 1986 ISSN: 0253-6250 DOCUMENT TYPE: ArticleRECORD TYPE: Abstract LANGUAGE: KOREAN
ABSTRACT: The main cause of death intoxicated with the venom by the toxicity of the venom and the more frequent snake bites in Korea are caused by Agkistrodon snakes. So this experimental studies were carried out to observe the cardiotoxicity of venoms of Agkistrodon snakes in Korea, which consists of Agkistrodon b. brevicaudus, Agkistrodon caliginosus and Agkistrodon s. s. s. Experimental animals were adult rats with weight ranged 200 approx. 250 gm. Venoms of A. b. brevicaudus (44 mg), A. caliginosus (32 mg) and A. s. s. s. (40 mg) were diluted in 12 ml of normal saline solution just before injection and 0.4 ml of this solution was administered through the tail vein of each rat. Then histopathological observations with light and electron microscope, were done on the heart of the rats died after intoxication with the venoms. The results obtained were as follows. 1. The heart of the intoxicated rat revealed marked hemorrhage in the ventricular and subendocardial myocardium especially in apical portion, grossly. Moderate to marked congestion, edema and hemorrhage were seen in the subendocardium and ventricular myocardium with coagulation necrosis and infiltration of a few neutrophils in the nemorrhagic areas. No fibrin thrombi was noted. 2. Electron microscopic changes of ventricular myocardium revealed marked intracellular edema with lifting, bullae formation and rupture of the sarcolemma as well as separation of myofilaments and myofibrils with random focal losses of myofibrils. Mitochondrial swelling and vacuole formation with focal necrosis of subcellular

microorganelles in the sarcoplasm were also noted. 3. Although there was little difference in death rates of three kinds of venoms, the basic pathologic changes of myocardial damages were similar. 4. Therefore, it was assumed that acute cardotoxicity with venoms of Agkistrodon snakes, characterized by marked edema and hemorrhage followed by coagulation necrosis in the myocardium, could cause acute death in early stage by circulatory collapse and shock and which effects could be referred to the hemotoxicity of venom in the myocardium of rats.

27726 (Item 26 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) formal only 2004 The Dialog Corp. All rts. reserv.

1719054 PMID: 15032748
Molecular evolution and structure-function relationships of crotxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms

Chen Yi-Hsuan; Wang Ying-Ming; Hsieu Ming-Jhy; Tsai Ilin-Ho

Institute of Biological Chemistry, Academia Sinica, POB 23-106, Taipei, Taiwan.
Biological journal (Engl.) Jul 1 2004; 38(1 Pt 1): p25-34. ISSN 1470-8728. Journal Code: 2984726R

Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed

Some myotoxic or neurotoxic PLAs (phospholipases A2) from pit viper venoms contain characteristic N6 substitutions. Our survey of the venoms of more than ten pit viper genera revealed that N6-PLA2s exist only in limited Asian pit vipers. Prolobothrops and Gloydius, and exist as either monomers or the basic subunits of heterodimers in some New World pit vipers.

For the newly identified N6-PLA2s, the neuromuscular blocking activities were assayed with the chick biventer cervix neurons from Prolobothrops mangshanensis and Gloydius intermedium saxatilis were found to be presynaptic neurotoxins. In contrast, all N6-PLA2s from the venoms of *Sistrurus miliaris* strackeni, *S. m. barbouri*, *Crotalus viridis*, *C. lepidus*, *C. cerrophidion godmani* and *Bothriechis schlegelii* were myotoxins without neurotoxicity even in the presence of crotinin A. Crotinin-like complexes were for the first time purified from the venoms of *Sistrurus catenatus* tergeminus, *C. mitchelli* mitchelli, *C. horridus atricaudatus*, *C. basiliscus* and *C. durissus cumannensis*. The cRNAs encoding six novel N6-PLA2s and subunits of the crotinin-like complex from *S. c. tergeminus* were cloned and fully sequenced. Phylogeny analysis showed that two structural subtypes of N6-PLA2s with either C42 or S24 substitution have evolved in parallel, descended respectively from species related to present-day Prolobothrops and Gloydius. Calmodulin binds all the N6-PLA2s but crotinin A may inhibit its binding to crotinin B and to other neurotoxic N6-PLA2s. Structure-activity relationships at various regions of the PLA2 molecules were extensively discussed. Record Date Created: 20040621 Record Date Completed: 20041104

27728 (Item 28 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.
000879482 BIOSIS NO.: 199308057373
NEUROTOXINS FROM THE VENOMS OF CROTALID SNAKES COLLECTED IN CHINA
BOOK TITLE: MATSUJI, M., T. HIKIDA AND R. C. GORIS (ED.) CURRENT HERPETOLOGY IN EAST ASIA: SECOND JAPAN-CHINA HERPETOLOGICAL SYMPOSIUM, KYOTO, JAPAN, JULY 1988. IX+521P. HERPETOLOGICAL SOCIETY OF JAPAN: KYOTO, JAPAN. ILLUS. MAPS
AUTHOR: ZHANG J (Reprint)
AUTHOR ADDRESS: SHANGHAI INST PHYSIOL ACADEMIA SINICA, CHINA**CHINA p505-506 1989 DOCUMENT TYPE: Meeting RECORD TYPE: Citation LANGUAGE: ENGLISH

27729 (Item 29 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

001234776 BIOSIS NO.: 199303049436

Neutralization of Agkistrodon saxatilis (Gloydius saxatilis) venom with CroTAb(R) in a murine model
AUTHOR: McNally J (Reprint); Boyer L (Reprint); Hare T (Reprint); Conroe P (Reprint); McCleure T (Reprint)
AUTHOR ADDRESS: Arizona Poison and Drug Information Center, University of Arizona Health Sciences Center, Tucson, AZ, USA**USA
JOURNAL: Journal of Toxicology Clinical Toxicology 37 (5): p67-668 Aug, 1999 MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the North American Congress of Clinical Toxicology La Jolla, California, USA September 28-October 4, 1999; 19990928 SPONSOR: North American Congress of Clinical Toxicology
ISSN: 0731-3810 DOCUMENT TYPE: Meeting. Meeting Abstract RECORD TYPE: Citation LANGUAGE: English

27730 (Item 30 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0014206479 BIOSIS NO.: 2003030155198

The Novel Angiogenic inhibitor Saxatilin Reduce Ocular Neovascularization Elicited by BFGF and Hyperoxia.
AUTHOR: Ahn B Y (Reprint); Lee S H; Ahn B Y; Yoo W I; You Y S; Kim D S
JOURNAL: ARVO Annual Meeting Abstract Search and Program Planner 2002 p Abstract No. 3716 2002 2002
MEDIUM: cd-form CONFERENCE/MEETING: Annual Meeting of the Association For Research in Vision and Ophthalmology Fort Lauderdale, Florida, USA May 05-10, 2002. 20020505 DOCUMENT TYPE: Meeting. Meeting Abstract
RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Purpose: The purpose of the present study was to explore the potential of saxatilin in the treatment of ocular neovascularization. In the previous studies, anti-angiogenic activity of this polypeptide was determined in cultured primary human umbilical vein endothelial cell proliferation induced by bFGF. Saxatilin is a novel disintegrin derived from venom of Gloydius

saxatilis, potently inhibited human platelet aggregation caused by adenosine diphosphate (ADP) through the blockade of fibrinogen binding to platelet glycoprotein IIb/IIIa. This protein is a single-chain polypeptide composed of 73 amino acids including the tripeptide sequence Arg-Gly-Asp, a proposed recognition site of adhesive proteins. Methods: We demonstrated that saxatilin is an inhibitor of angiogenesis induced by bFGF(65ng) in rabbit cornea. And we investigated whether saxatilin could inhibit retinal neovascularization on oxygen induced retinopathy (OIR) mouse model. Retinal neovascularization was induced in newborn mice by exposure to hyperoxia (75% oxygen / five days), and then normoxia. Saxatilin was intraperitoneally injected into the mouse model (0.1-10 mg/kg/day for five days). The severity of retinopathy was assessed by a retinopathy scoring system of fluoresce conjugated dextran-perfused or ADPase stained retinal flat mounts. Results: Treatment with saxatilin revealed a significant reduction of corneal vessel growth in animals with bFGF-induced corneal vascularization, haemorrhage, and blood vessel tortuosity. Intraperitoneal injection of saxatilin resulted in fewer neovascular tufts and pre-retinal vascular cells than in control mouse with vehicle injection. Conclusion: These results suggest that saxatilin, angiogenic inhibitor could have therapeutic effects on ocular neovascular diseases.

27731 (Item 31 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0014770613 BIOSIS NO.: 200403137957

Purification, cDNA cloning and sequence analysis of thrombin-like enzyme from *Gloydius saxatilis*.

AUTHOR: Sun De-Jun (Reprint); Yang Chun-Mei; Yang Tong-Shu; Yan Wei-Qun; Wang Wei

AUTHOR ADDRESS: Institute of Frontier Medical Science, Jilin University, Changchun, 130021, China**China

AUTHOR E-MAIL ADDRESS: sunqj@jlu.edu.cn

JOURNAL: Acta Zootaxonomica Sinica 49 (6): p878-882 Dec, 2003 MEDIUM: print ISSN: 0001-7302

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: Chinese

ABSTRACT: Thrombin-like enzyme has great medical application in treating thrombus. A thrombin-like enzyme from *Gloydius saxatilis* snake venom was isolated and purified to homogeneity by a rapid and effective method using ion-exchange chromatography on DEAE-Sepharose and affinity chromatography on heparin-Sepharose. SDS-polyacrylamide electrophoresis under reducing condition revealed that the purified enzyme had a single protein band and its molecular weight was 32,000 dal. Total RNAs were extracted from the venom gland of the *G. saxatilis* snake. Using degenerate primers, we amplified the cDNA of the thrombin-like enzyme gene in the venom gland of *G. saxatilis* using the reverse transcription-polymerase chain reaction (RT-PCR) method. The cDNA fragment was inserted into pGEMT vector, cloned and its nucleotide sequence was determined. Its reading frame is composed of 774 nucleotides and codes a protein prezymogen of 258 amino acids, including a putative secret signal peptide of 18 amino acids and a proposed pro-peptide of 6 amino acid residues. It contains 12 cysteine residues. The sequence analysis indicates that the deduced amino acid sequence of the cDNA fragment shares high identity with the thrombin like enzyme genes of other snakes in the gene bank. The query sequence exhibits strong amino acid sequence homology of 88% and 86% to the serine protease of *T. gramineus* thrombin-like esterase I of *D. acutus* and serine protease cathepsin B of *O. atrox* respectively. Based on the amino acid sequences of other thrombin-like enzymes, the catalytic residues and disulfide bridges of this thrombin-like enzyme are deduced as follows: catalytic residues: His65, Asp110, Ser204; and six disulfide bridge Cys31-Cys163, Cys50-Cys66, Cys74-Cys26, Cys142-Cys140, Cys74-Cys189 and Cys200-Cys225. According to the possible linked glycosylation sites N-X-T (Asn-X-Thr) or N-X-S (Asn-X-Ser), its possible glycosylation sites are N44-S45-T46 and N251-T252-T253 residues.

27732 (Item 32 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.

0005739597 BIOSIS NO.: 1987493746

PATHOLOGICAL STUDIES ON THE EFFECTS OF VENOM OF AGKISTRODON SAXATILIS IN THE HEART OF RATS

AUTHOR: CHUN O B (Reprint); SONG K Y; SHIM T S

AUTHOR ADDRESS: DEP PEDIATRICS PATHOL, COLL MED, CHUNG-ANG UNIV, SEOUL 151, KOREA**KOREA

JOURNAL: Chung Ang Journal of Medicine 12 (1): p1-14 1987 ISSN: 0253-6250 DOCUMENT TYPE: Article

RECORD TYPE: Abstract LANGUAGE: KOREAN

ABSTRACT: For the elucidation of mechanism of circulatory collapse in acute venom intoxication, an experimental studies was carried out for the cardiotoxic effect of rat myocardium using the venom of *Agkistrodon saxatilis*. The rats used were adults weighing between 200 apprx. 250 gm. 40 mg of freeze dried venom was diluted to 12 ml of normal saline, and 0.4 ml of this solution was administered intravenously through tail vein to each rat. The rats were sacrificed serially with time interval, after venom administration 1 hour, 3 hours, 6 hours, 1 day, 4 days and 7 days, respectively. The hearts were immediately prepared light and electron microscopy. Additionally serum enzymes, namely glutamic oxaloacetic transaminase (GOT), lactic dehydrogenase (LDH) and creatinine phosphokinase (CPK) were measured for the associated changes. The results obtained were as follows: Light microscopic changes in the heart revealed moderate to marked congestion, edema and hemorrhage in ventricular and subendocardial myocardium with coagulation necrosis of myocardial muscles in the hemorrhagic areas in 1 h after venom administration. Congestion and edema were reduced but hemorrhagic areas were infiltrated with a few inflammatory cells in 3 apprx. 6 hours. Thereafter fibrosis was due in the areas of necrosis. Early electron microscopic changes in the myocardium revealed marked intracellular edema with lifting, bleb formation and rupture of sarcolemma as well as separation myofilaments and focal random loss of myofilaments. Mitochondrial swelling and vacuolar change were also seen. Serum level GOT were significantly elevated in 3 hours to 312.5+-123.6 IU/(P<0.05) until 6 hours to 376.7+-283.5 IU/(p<0.01). Serum level LDH were significantly reduced in 24 hours to 508.1+-269.0 IU/(p<0.01) until 4 days to 453.4+-190.3 IU/(p<0.01). Serum levels of CPK were significantly reduced in 24 hours to 306.1+-205.1 IU/(p<0.01) until 4 days

Summarizing the above results, it was suggested that cardiotoxicity of the venom of Agkistrodon saxatilis, characterized by marked myocardial edema and hemorrhage with necrosis, could play a role in explaining acute circulatory collapse in rats. It was also interesting to note that the extent of myocardial damage did not parallel to the levels of serum glutamic oxaloacetic transaminase, lactic dehydrogenase and creatinine phosphokinase.

- 27/33 (Item 33 from file: 5) DIALOG(R)File 5: Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 0002225358 BIOSIS NO.: 197866073847
 SNAKE BITES IN SOUTH KOREA
 AUTHOR: SAWAYI, JPN SNAKE INST., YABUZUKA-HONMACHI, NITTAGUN, GUNMA 379-23, JPN** JAPAN
 JOURNAL: Snake 9 (2): p39-47 1978 ISSN: 0368-3425 DOCUMENT TYPE: Article RECORD TYPE: Abstract
 LANGUAGE: ENGLISH
 ABSTRACT: Epidemiologic and clinical studies on 82 patients of Korean mamushi bites admitted to the Wonju Union Christian Hospital in Korea from 1959 through 1973 were carried out. The mamushi responsible for the bites were Agkistrodon bimaculatus brevicaudus Steinerger, A. caliginosus Gloyd and A. saxatilis Emelianov. During warmer months from May through Sept., 97.6% of the total bites were reported. Seventy-eight percent of the bites were distributed between the ages of 10-40, and bites in males were 2 times as frequent as those in females. Seventy percent of the bites were reported in agricultural fields, 21% in mountains and 8.5% in residences. Most bites occurred in extremities (92.7%), 68.3% were in lower extremities and 25.3% in upper extremities. The highest number of bites occurred on feet (52.4%), and 19.5% on fingers and 13.4% on legs. Major local symptoms and signs were pain, bleeding from wound, swelling, subcutaneous hemorrhage and necrosis. The rate of occurrence of necrosis was high because of prolonged application of tourniquet. Systemic symptoms and signs such as ptosis of eyelids, blurred vision, drowsiness or unconsciousness, vomiting, dyspnea, fever and abdominal pain were reported in 18 bites. The cause of 4 deaths that occurred 4-9 days after the bites was probably prolonged shock induced by subacute effect of the venom
- 27/34 (Item 34 from file: 55) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.
 11691720 PMID: 11864711
 Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration.
 Hong Sung-Yu; Koh You-Seok; Chung Kwang-Hoe; Kim Doo-Sik
 Department of Biochemistry, College of Science, and Bioproducts Research Center, Yonsei University, Seoul 120-749, South Korea.
- Thrombosis research (United States) Jan 1 2002; 105 (1): p79-86; ISSN 0049-3848 Journal|Code: 03263777 Document type: Journal Article Languages: ENGLISH. Main Citation Owner: NLM. Record type: Completed
 A novel disintegrin, saxatilin, was purified from Korean snake (Gloydius saxatilis) venom by means of chromatographic fractionations. We have also isolated the cDNA encoding the disintegrin using cDNA library of the snake venom gland and analyzed its complete nucleotide sequence. Saxatilin is a single-chain polypeptide composed of 73 amino acids including 112 cysteines as well as the tripeptide sequence Arg-Gly-Asp (RGD), a proposed recognition site of adhesive proteins. Molecular mass of saxatilin was determined to be 7712 Da by matrix-assisted laser desorption ionization mass spectrometry. Saxatilin inhibits glycoprotein (GP) IIb-IIIa binding to immobilized fibronectin with IC₅₀ of 2.0 nM and ADP-induced platelet aggregation with IC₅₀ of 127 nM, respectively. The snake venom disintegrin also significantly suppresses basic fibroblast growth factor-induced human umbilical vein endothelial cell (HUVEC) proliferation, but has little effect on normal growth of the cell. Interaction of human umbilical vein cell to immobilized vitronectin is also inhibited by binding of saxatilin to alpha(v)beta(3) integrin. Adhesion of smooth muscle cells (SMCs) to vitronectin as well as vitronectin-induced migration of the cells was strongly inhibited by saxatilin. Several lines of experimental evidence suggest potential use of saxatilin for development of therapeutic agents. Record Date Created: 20020726 Record Date Completed: 20020712
- 5/6/1 (Item 1 from file: 155)
 10691273 PMID: 11024495
 Biochemical characterization of a thrombin-like enzyme and a fibrinolytic serine protease from snake (Agkistrodon saxatilis) venom. Apr 2001
- 5/6/2 (Item 2 from file: 5) 001285323 BIOSIS NO.: 200100025762
 Biochemical characterization of a thrombin-like enzyme and a fibrinolytic serine protease from snake (Agkistrodon saxatilis) venom 2001
- 5/6/3 (Item 3 from file: 5) 000428033 BIOSIS NO.: 199478017440
 CLASSIFICATION OF AGKISTRODON SPECIES IN CHINA 1954
 CLINICAL ANALYSIS ON VENOMOUS SNAKE BITES IN KOREA 1975
- 5/6/4 (Item 4 from file: 155) 06512337 PMID: 6426095
 Classification of Agkistrodon species in China. 1984
- 5/6/5 (Item 5 from file: 5) 000428033 BIOSIS NO.: 199478017440
 CLASSIFICATION OF AGKISTRODON SPECIES IN CHINA 1954
- 5/6/6 (Item 6 from file: 5) 0003619559 BIOSIS NO.: 19924035982
 EFFECT OF MICROBIAL VENOM PROTEINASE INHIBITORY SUBSTANCE ON SOME ENZYMES IN SNAKE VENOMS 1981
- EFFECTS OF VENOMS FROM KOREAN AGKISTRODON SNAKES ON BASIC HEMATOLOGIC FINDINGS IN MICE 1984
 5/6/8 (Item 8 from file: 5) 0002038118 BIOSIS NO.: 197713064110
 EXPERIMENTAL STUDIES ON KOREAN SNAKE VENOMS 1976
- 5/6/9 (Item 9 from file: 5) 0008791082 BIOSIS NO.: 199191079980
 Fibrinolytic and coagulation activities of Korean snake venoms 1992
- 5/6/10 (Item 10 from file: 5) 0007697089 BIOSIS NO.: 19874082959
 HISTOPATHOLOGICAL OBSERVATIONS ON THE EFFECTS OF AGKISTRODON SNAKES 1986
- 5/6/11 (Item 11 from file: 5) 0005728810 BIOSIS NO.: 198784082959
 HISTOPATHOLOGICAL STUDIES ON THE HEART OF RAT INTOXICATED WITH THE VENOMS OF AGKISTRODON SNAKES 1
- 5/6/12 (Item 12 from file: 5) 0005665106 BIOSIS NO.: 198681028997
 Molecular evolution and structure-function relationships of crotxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms 20
- 5/6/13 (Item 13 from file: 5) 17190054 PMID: 15032748
 Molecular evolution and structure-function relationships of crotxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms. Ju 2004
- 5/6/14 (Item 14 from file: 5) 0014983529 BIOSIS NO.: 200404064718
 Molecular evolution and structure-function relationships of crotxin-like and asparagine-6-containing phospholipases A2 in pit viper venoms 20
- 5/6/15 (Item 15 from file: 5) 0006879482 BIOSIS NO.: 1990380957373 NEUROTOXINS FROM THE VENOMS OF CROTALID SNAKES COLLECTED IN CHINA BOOK TITLE: MATSU, M., T. HIKIDA AND R. C. GORIS (ED.) CURRENT HERPETOTOLOGY IN EAST ASIA; SECON JAPAN-CHINA HERPETOLOGICAL SYMPOSIUM, KYOTO, JAPAN, JULY 1988. IX-521P. HERPETOLOGICAL SOCIETY OF JAPAN: KYOT JAPAN ILLUS. MAPS 1989
- 5/6/16 (Item 16 from file: 5) 0012234776 BIOSIS NO.: 199900494436
 Neutralization of Agkistrodon saxatilis (Gloydius saxatilis) venom with CroTAb(R) in a murine model 1998
- 5/6/17 (Item 17 from file: 5) 0014206479 BIOSIS NO.: 200301615198
 The Naval Antigenic inhibitor r Saxatilin Reduce Ocular Neovascularization Elicited by bFGF and Hypoxia 2002
- 5/6/18 (Item 18 from file: 5) 0014770613 BIOSIS NO.: 200400137367
 Purification, cDNA cloning and sequence analysis of thrombin-like enzyme from Gloydius saxatilis 2003
- 5/6/19 (Item 19 from file: 5) 0005739597 BIOSIS NO.: 198784093746
 PATHOLOGICAL STUDIES ON THE EFFECTS OF VENOM OF AGKISTRODON - SAXATILIS IN THE HEART OF RATS 1987
- 5/6/20 (Item 20 from file: 5) 0002225558 BIOSIS NO.: 197886073847
 SNAKE BITES IN SOUTH KOREA 1978
- 5/6/21 (Item 21 from file: 55) 11691720 PMID: 11864711
 Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration. Jan 1 2002
- 5/6/22 (Item 22 from file: 5) 0013636201 BIOSIS NO.: 200200229712
 Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration 2002
- 5/6/23 (Item 23 from file: 349) 00883862 **Image available**
 ANTI-CANCER AGENTS COMPRISING DISINTEGRIN GENES AND THE TREATING METHODS AGENTS ANTICANCERUX COMPRENDA DES GENES DE DISINTEGRINE ET PROCÉDÉS DE TRAITEMENT ASSOCIES Publication Language: Korean Fu Availability: Detailed Description Claims Fulltext Word Count: 2890 Publication Year: 2003
- 5/6/24 (Item 24 from file: 349) 00883862 **Image available**
 NOVEL PROTEIN DERIVED FROM AGKISTRODON SAXATILIS EMELIANOV AND PROCESS FOR PREPARING THE SAME NOUVELLE PROTEINE DERIVÉE D' AGKISTRODON SAXATILIS EMELIANOV ET SON PROCÉDÉ DE PRÉPARATION Publication Language: English Filing Language: Korean Fulltext Word Count: 6537 Publication Year: 2002
- 5/7/22 (Item 22 from file: 5) DIALOG(R)File 5: Biosis Preview(R) (c) 2004 BIOSIS. All its. reserv.
 0013636201 BIOSIS NO.: 200200229712
 Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration
 AUTHOR: Hong Sung-Yu; Koh You-Seok; Chung Kwang-Hoe; Kim Doo-Sik (Reprint)
 AUTHOR ADDRESS: Department of Biochemistry, College of Science, and Bioproducts Research Center, Yonsei University Seoul, 120-749, South Korea**South Korea
 JOURNAL: Thrombosis Research 105 (1): p79-86 January 1, 2002 2002 MEDIUM: print ISSN: 0049-3848
 c e b c g h

ABSTRACT: A novel disintegrin, saxatilin, was purified from Korean snake (*Gloydius saxatilis*) venom by means of chromatographic fractionations. We have also isolated the cDNA encoding the disintegrin using cDNA library of the snake venom gland and analyzed its complete nucleotide sequence. Saxatilin is a single-chain polypeptide composed of 73 amino acids including 12 cysteines as well as the tripeptide sequence Arg-Gly-Asp (RGD), a proposed recognition site of adhesive proteins. Molecular mass of saxatilin was determined to be 7712 Da by matrix-assisted laser desorption ionization mass spectrometry. Saxatilin inhibits glycoprotein (GP) IIb-IIIa binding to immobilized fibrinogen with IC₅₀ of 2.0 nM and ADP-induced platelet aggregation with IC₅₀ of 127 nM, respectively. The snake venom disintegrin also significantly suppresses basic fibroblast growth factor-induced human umbilical vein endothelial cell (HUVEC) proliferation, but has little effect on normal growth of the cell. Interaction of human umbilical vein cell to immobilized vitronectin is also inhibited by binding of saxatilin to alphavbeta3 integrin. Adhesion of smooth muscle cells (SMCs) to vitronectin as well as vitronectin-induced migration of the cells was strongly inhibited by saxatilin. Several lines of experimental evidence suggest potential use of saxatilin for development of therapeutic agents.

- 6/6/1 (Item 1 from file: 5) 11097126 PMID: 11147345
[Phylogenetic relationships among Viperidae. Crotalinae based on mitochondrial 12S rRNA sequence variations] 2000
- 6/6/2 (Item 1 from file: 5) 0013288456 BIOSIS NO.: 200110460295
Phylogenetic relationships among Crotalinae based on mitochondrial cytochrome B gene sequence variations 2001
- 6/6/3 (Item 2 from file: 5) 0012669693 BIOSIS NO.: 200000388006
Phylogenetic relationships among Viperidae. Crotalinae based on mitochondrial 12S rRNA sequence variations 2000
- 6/6/4 (Item 3 from file: 5) 0012381137 BIOSIS NO.: 200000099450
Comparative studies on the skull morphology of Chinese species of Agkistrodon and Dendroagkistrodon, with discussion on their classification (Serpentes: Crotalinae) 1996
- 6/6/5 (Item 4 from file: 5) 0012051297 BIOSIS NO.: 199900310957
RAPD analysis of pit-vipers of the genus Agkistrodon in China 1999
- 6/6/6 (Item 5 from file: 5) 0010401610 BIOSIS NO.: 19963905670
Comparative observations on dorsal scales of shed skins of the genus Agkistrodon (Viperidae, Crotalinae) from Far East Asia 1995
- 6/6/7 (Item 6 from file: 5) 0007642535 BIOSIS NO.: 199191025426
IMMUNOCYTOTOCHEMICAL STUDY ON THE ENTEROENDOCRINE CELLS IN THE GASTROINTESTINAL TRACTS OF THE KOREAN SNAKES 1990
- 6/6/8 (Item 7 from file: 5) 0007521304 BIOSIS NO.: 199141033330
COMPARATIVE STUDY OF PROTEIN C ACTIVATORS FROM THE AGKISTRODON SNAKE VENOMS 1991
- 6/6/9 (Item 8 from file: 5) 0007195195 BIOSIS NO.: 198089113086
HERPETOLOGICAL OBSERVATIONS IN THE USSR'TAIGA SOVIET FAR EAST RUSSIAN SFSR USSR 1989
- 6/6/10 (Item 9 from file: 5) 0006879439 BIOSIS NO.: 199038075730
CLASSIFICATION OF AGKISTRODON HALYS IN NORTHEAST CHINA BOOK TITLE: MATSUI, M., T. HIKIDA AND R. C. GORIS (ED.). CURRENT HERPETOLOGY IN EAST ASIA: SECOND JAPAN-CHINA HERPETOLOGICAL SYMPOSIUM, KYOTO, JAPAN, JULY 1988. IX+521P. HERPETOLOGICAL SOCIETY OF JAPAN: KYOTO, JAPAN ILLUS. MAPS 1989
- 6/6/11 (Item 10 from file: 5) 0005011388 BIOSIS NO.: 198631038287
A STUDY ON AGKISTRODON -CALIGINOSUS 1985
- 6/6/12 (Item 11 from file: 5) 0004651100 BIOSIS NO.: 198579072999
EFFECTS OF KOREAN SNAKE VENOMS ON THE CONTRACTILITY AND ACTION POTENTIAL OF FROG VENTRICULAR MUSCLE CELLS 1984
- 6/6/13 (Item 12 from file: 5) 0004619412 BIOSIS NO.: 198579038311
A DESCRIPTION OF A SMALL COLLECTION OF AMPHIBIANS AND REPTILES FROM NORTH KOREA WITH NOTES ON THE DISTRIBUTION OF THE HERPETOFAUNA IN THAT COUNTRY 1984
- 6/6/14 (Item 13 from file: 5) 0004201631 BIOSIS NO.: 198477033542
BIOCHEMICAL VARIATION AND SYSTEMATIC STATUS OF THE GENUS AGKISTRODON CROTALIDAE IN KOREA 1978
- 6/6/15 (Item 14 from file: 5) 0002885192 BIOSIS NO.: 198019061681
A MICROBAL INHIBITORY SUBSTANCE TO SNAKE VENOMS 1979
- 6/6/16 (Item 15 from file: 5) 000283050 BIOSIS NO.: 198019085339
STUDY ON IMMUNOLOGICAL RELATIONSHIPS BETWEEN VENOMS OF THE ASIATIC AGKISTRODON 1979
- 6/6/17 (Item 16 from file: 5) 0002715769 BIOSIS NO.: 197968027268
NEW DATA ON ECOLOGY OF AGKISTRODON SAXATILIS REPTILA CROTALIDAE FROM THE PRIMORSKI-KRAI 1978
- 6/6/18 (Item 17 from file: 5) 0002402200 BIOSIS NO.: 197865663187
- 6/6/19 (Item 18 from file: 5) 0002220232 BIOSIS NO.: 197764068589
IMMUNOLOGICAL COMPARISON OF THE REPTILIAN M4 LACTIC DEHYDROGENASE ISOZYME 1976
- 6/6/20 (Item 19 from file: 5) 00020892072 BIOSIS NO.: 197763012928
ELECTROPHORESIS OF REPTILIAN BLOOD PROTEINS 1976
- 6/6/21 (Item 20 from file: 5) 0001920142 BIOSIS NO.: 197662016881
MEDICAL TREATMENT OF SNAKE BITES PART 1 JAPAN AND KOREA 1975
- 6/6/22 (Item 21 from file: 5) 0001130912 BIOSIS NO.: 197458006761
THE KOREAN SNAKES OF THE GENUS AGKISTRODON CROTALIDAE 1972
- 6/7/5 (Item 4 from file: 5) DIALOG(R)File 5 Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.
0012051297 BIOSIS NO.: 199900310557
RAPD analysis of pit-vipers of the genus Agkistrodon in China
AUTHOR: Shen Xi (Reprint); Zhou Kai-Ya (Reprint); Wang Yi-Quan (Reprint)
AUTHOR ADDRESS: Biodiversity and Molecular Evolution Laboratory, Nanjing, 210097, China **China
JOURNAL: Acta Zoologica Sinica 45 (1): p40-48 March, 1999 1999
MEDIUM: print ISSN: 0001-7302 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: Chinese
ABSTRACT: The phylogenetic relationship of pit-vipers of the genus Agkistrodon from China was studied using RAPD technique. Totals of 33 samples of Agkistrodon and 2 samples of *Vipera ussuriensis* were used in this study, and phylogenetic relationships were inferred using UPGMA based on 72 RAPD makers which were amplified with 11 decamer primers. Each of the species cluster respectively first. Considerable intraspecific differentiation was found in *A. intermedius*. A certain genetic distance was detected among *A. i. intermedius*, *A. i. saxatilis* and *Gansu* samples and Ningxia samples of *A. intermedius*. *A. sheldoni* showed a higher genetic distance to these subspecies (populations) of *A. intermedius*. The samples of *A. brevicaudus* from Liangsu, Zhejiang and Anhui Provinces showed closer relationship among each other than that between them and the samples from Shaanxi Province. The samples of Agkistrodon from high altitude regions of both Gansu and Shaanxi Provinces probably should be referred to *A. strauchi*. *A. ussurensis* is identified as the most basal lineage of the genus Agkistrodon from China. The results of RAPD analysis suggest that the genus Agkistrodon is a highly differentiated group.
- 6/7/7 (Item 6 from file: 5) DIALOG(R)File 5 Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.
0007642535 BIOSIS NO.: 199191025426
IMMUNOCYTOTOCHEMICAL STUDY ON THE ENTEROENDOCRINE CELLS IN THE GASTROINTESTINAL TRACTS OF THE KOREAN SNAKES
AUTHOR: JIN W J (Reprint); JO UB; CHOI W B
AUTHOR ADDRESS: DEP BIOL EDUC, PUSAN NATL UNIV, PUSAN, KOREA 609-735**SOUTH KOREA
JOURNAL: Korean Journal of Zoology 33 (3): p276-296 1990 ISSN: 0440-2510 DOCUMENT TYPE: Article
RECORD TYPE: Abstract LANGUAGE: KOREAN
ABSTRACT: This study attempts to investigate several enteroendocrine cells in the gastrointestinal epithelial of the Korean snakes (Dinodon rufozonatum, Rhabdophis tigrinus, Enhydris rufozonatus, Agkistrodon blomhoffii brevicaudus Agkistrodon saxatilis). Agkistrodon caliginosus). For a light-microscopical examination of immunocytochemistry, the paraffin sections (5 .mu.m) of tissue specimens taken from the various parts of the gastrointestinal tract were stained immunocytochemically by PAP procedure with 10 antisera. The frequency of enteroendocrine cells per unit area (mm²) of each mucosa were counted and the shapes of the cells were observed. In Dinodon rufozonatum rufozonatum, Rhabdophis tigrinus, Enhydris rufozonatus, Agkistrodon caliginosus, cholecystokinin (CCK)-8, gastrin, pancreatic polypeptide (PP) and serotonin (5 .mu.m) of tissue cells were observed. But the frequency of these immunoreactive cells differ from each portion of gastrointestinal tract were stained species, respectively. In Agkistrodon blomhoffii brevicaudus, CCK-8, gastrin and serotonin cells were observed. CCK-8 and serotonin cells were found in whole gastrointestinal tracts and gastrin cells were observed in pylorus and mucosa of small intestines. The frequency of these cells was different from each portion. The shapes of CCK-8, gastrin, PP and serotonin cells were pyramidal or oval and closed type in stomach. A large number of these cells were spindle in shape and open type in small intestine and anterior part of large intestine, whereas some cells were closed type. In posterior part of large intestine and rectum these cells were oval in shape and closed type.
- 6/7/8 (Item 7 from file: 5) DIALOG(R)File 5 Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.
0007521304 BIOSIS NO.: 199141033930
COMPARATIVE STUDY OF PROTEIN C ACTIVATORS FROM THE AGKISTRODON SNAKE VENOMS
AUTHOR: KOGAN A E (Reprint); MAKAROV A N; BOBRUSKIN I D; STRUKOV S M
AUTHOR ADDRESS: DEP HUMAN PHYSIOL, BIOL FAC, MOSCOW STATE UNIV, MOSCOW, 119899, USSR***USSR
JOURNAL: Thrombosis Research 62 (6): p775-780 1991 ISSN: 0049-3848 DOCUMENT TYPE: Article
RECORD TYPE: Citation LANGUAGE: ENGLISH
- 6/7/11 (Item 10 from file: 5) DIALOG(R)File 5 Biosis Previews(R) (c) 2004 BIOSIS. All rts. reserv.
0005017388 BIOSIS NO.: 198631098287

AUTHOR: TORIBA M (Reprint)
 AUTHOR ADDRESS: JAPAN** JAPAN
 JOURNAL: Japanese Journal of Herpetology 11 (2); p64 1985 CONFERENCE/MEETING: 24TH ANNUAL MEETING OF THE HERPETOLOGICAL SOCIETY OF JAPAN, YOKOSUKA, JAPAN SEPT. 29, 1985. JPN J HERPETOL. ISSN: 0285-3191 DOCUMENT TYPE: Meeting RECORD TYPE: Citation LANGUAGE: JAPANESE

6/7/12 (Item 11 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 00046440 BIOSIS NO.: 198579072999 EFFECTS OF KOREAN SNAKE VENOMS ON THE CONTRACTILITY AND ACTION POTENTIAL OF FROG VENTRICULAR MUSCLE CELLS
 AUTHOR: HAN H-I (Reprint); BANG H-W; UHM D-Y; RHEE S-D
 AUTHOR ADDRESS: DEP PHYSIOL, COLL MED, CHUNG-ANG UNIV, SEOUL 151, KOREA** KOREA
 JOURNAL: Chung-Ang Journal of Medicine 9 (3); p261-268 1984 ISSN: 0253-6250 DOCUMENT TYPE: Article
 RECORD TYPE: Abstract LANGUAGE: KOREAN
 ABSTRACT: To observe the effects of freeze-dried saliva of Agkistrodon caliginosus and A. saxatilis, on the contractility and action potential of frog ventricular muscle cells, the isometric tension in a vertical chamber and the action potential in horizontal chamber were recorded and analyzed. Korean snake venoms decrease the ionic current underlying the rapid upstroke phase and slow inward currents by Ca²⁺ simultaneously in frog ventricular muscle cells.

6/7/15 (Item 14 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 0002885192 BIOSIS NO.: 198019681681 A MICROBIAL INHIBITORY SUBSTANCE TO SNAKE VENOMS
 AUTHOR: JUN-EHWAN S (Reprint); DONG-HEU Y
 AUTHOR ADDRESS: DEP AGRIC CHEM, COLL AGRIC, KYUNGDOOK NATL UNIV, PUKKU, TAEGLU, S KOREA**KOREA
 JOURNAL: Snake 11 (2); p184-198 1979 ISSN: 0386-3425 DOCUMENT TYPE: Article RECORD TYPE: Citation
 LANGUAGE: ENGLISH
 6/7/16 (Item 15 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 000283050 BIOSIS NO.: 19801909539 STUDY ON IMMUNOLOGICAL RELATIONSHIPS BETWEEN VENOMS OF THE ASIATIC AGKISTRODON
 AUTHOR: SAWAYI (Reprint); KAWAMURA Y
 AUTHOR ADDRESS: JPN SNAKE INST, GUNMA, JPN**JAPAN
 JOURNAL: Toxicon 17 (SUPPL_1); p160 1979 CONFERENCE/MEETING: 6TH INTERNATIONAL SYMPOSIUM ON ANIMAL, PLANT AND MICROBIAL TOXINS, UPPSALA, SWEDEN AUG. 1979. TOXICON. ISSN: 0041-0101 DOCUMENT TYPE: Meeting RECORD TYPE: Citation LANGUAGE: ENGLISH
 6/7/17 (Item 16 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 0002715769 BIOSIS NO.: 197968027268 NEW DATA ON ECOLOGY OF AGKISTRODON SAXATILIS REPTILA CROTALIDAE FROM THE PRIMORSKI-KRAI
 AUTHOR: KOROTKOV YU M (Reprint)
 AUTHOR ADDRESS: BIOL-SOIL INST, FAR EAST SCIENT ACAD SCI USSR, VLADIVOSTOK, USSR**USSR
 JOURNAL: Vestn Zoolii (4): p33-37 1978 ISSN: 0084-5604 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: RUSSIAN
 ABSTRACT: A. saxatilis dominates in mountain-forest associations of snakes in Primorski Territory. Its occurrence reaches 56.8-84.5%. Most females have a 2 yr reproductive cycle, some a 3 yr cycle. The reproductive potential in populations is equal to 4.8-7.2. After the 1st wintering about 3.5% of young survive. Adult individuals account for 82-86% of the population number. Populations are located near winter resting-places and are distinguished by ecological and certain morphological characters. The connection between the populations in years of mrid number depression is maintained by migrants which probably survive in other wintering places.

Ref	Items	Description
N1	154	34: SciSearch(R) Cited Ref Sci_1990-2004(Nov W4
N2	150	440: Current Contents Search(R)_1990-2004(Dec 03
N3	112	5: Biosis Previews(R)_1989-2004(Nov W3
N4	95	155: MEDLINE(R)_1951-2004(Nov W4
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N7	67	73: EMBASE_1974-2004(Nov W4
N8	40	71: ELSEVIER BIOBASE_1994-2004(Nov W3
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N12	18	94: JICST_EPlus_1985-2004(Oct W4
N13	16	185: Zoological Record Online(R)_1978-2004(Oct
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N19	6	16: Gale Group PROMTR(R)_1990-2004(Dec 03
N20	6	340: CLAIMS(R)/US Patent_1950-04(Nov 30
		49 files have one or more items, file list includes 254 files.
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SYSTEM:OS - DIALOG OneSearch	S1	298 (AGKISTRODON OR GRODIUS) AND PLATELET
File 155: MEDLINE(R) 1981-2004(Nov W4	S2	139 RD (unique items)
File 5: Biosis Previews(R) 1963-2004(Nov W3	S3	2930 SAXATILIS
File 154: MEDLINE(R) 1990-2004(Nov W4	S4	0 S3 AND S1
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	S6	0 S1 AND S5
	S7	336053 PLATELET
	S8	8 S3 AND S7
	S9	452 (AGKISTRODON OR GRODIUS) AND PLATELET
		Add 34 SciSearch(R) Cited Ref Sci_1990-2004(Nov W4

- S10 234 RD (unique items)
- S11 4242 SAXATILIS
- S12 0 S11 AND S10
- S13 4799 SAXA?
- S14 0 S10 AND S13
- S15 3681 DISINTEGRIN
- S16 50 (AGKISTRODON OR GROYDIUS) AND S15 NOT S9
- S17 22 RD (unique items)
- 26/21 (Item 1 from file: 155) 14091904 PMID: 9787163
Accutin, a new disintegrin, inhibits angiogenesis in vitro and in vivo by acting as integrin alphavbeta3 antagonist and inducing apoptosis. Nov 1 1
- 26/22 (Item 22 from file: 155) 14060840 PMID: 9760469
Biochemical and pharmacological properties of thrombin-like protein from Agkistrodon cinctus. Jul 1998
- 26/23 (Item 23 from file: 155) 14021943 PMID: 9722022
Purification and molecular cloning of a platelet aggregation inhibitor from the snake (Agkistrodon halys brevicaudatus) venom. Jul 15 1998
- 26/24 (Item 24 from file: 155) 13988648 PMID: 9690782
Diversity of cDNAs encoding phosphoprotease A2 from Agkistrodon halys pallas venom, and its expression in E. coli. Aug 1998
- 26/25 (Item 25 from file: 155) 13956270 PMID: 9657448
The cDNA cloning and molecular characterization of a snake venom platelet glycoprotein Ib-binding protein, mamushgjin, from Agkistrodon halys blomhoffii venom. Jun 1998
- 26/26 (Item 26 from file: 155) 13465645 PMID: 9546675
Purification and amino acid sequence of halystase from snake venom of Agkistrodon halys blomhoffii, a serine protease that cleaves specific fibrinogen and kininogen. Mar 15 1998
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- 26/29 (Item 29 from file: 155) 12921360 PMID: 8585217
Purification and characterization of piscivore I and II, the fibrinolytic enzymes from eastern cottonmouth moccasin venom (Agkistrodon piscivorus piscivorus). Jul 1995
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Sequence analysis of fibrolase, a fibrinolytic metaloproteinase from Agkistrodon cantorix cantorix. Sep 1995
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Functional and sequence characterization of agkicelin, a new glycoprotein Ib antagonist isolated from Agkistrodon acutus venom. off24. May 1 1
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A new gene structure of the disintegrin family: a subunit of dimeric disintegrin has a short coding region. Dec 3 2002
- 26/38 (Item 38 from file: 155) 11829272 PMID: 12019442
[Purification and characterization of L-amino acid oxidase from Agkistrodon halys palmaris venom] May 2002
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Purification and characterization of a novel metalloproteinase, acutagjin, from Agkistrodon acutus venom. Apr 2002
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Purification, crystallization and preliminary X-ray crystallographic analysis of agkagargin, a C-type lectin-like protein from Agkistrodon a venom. Apr 2002
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Antithrombotic and thrombolytic activities of Agkisacadin, a snake venom proteinase, in experimental models. Oct 2002
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Cloning and characterization of novel disintegrins from Agkistrodon halys venom. Oct 31 1998
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The relationship between biological activity and the electronic structure and transfer of the whole acidic PL A2 molecule in ab initio level. Nov 16 1998
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Primary structure and biological activity of snake venom lectin (APL) from Agkistrodon p. piscivorus (Eastern cottonmouth). Jul 1999
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Cloning, expression and biochemical characterization of a basic-acidic hybrid phospholipase A2-II from Agkistrodon halys pallas. Apr 12 1999
- 26/47 (Item 47 from file: 155) 14182047 PMID: 9880793
Ussuriastatin 2, a novel KGD-bearing disintegrin from Agkistrodon ussurensis venom. Jan 1999
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Cloning and characterization of novel disintegrins from Agkistrodon halys venom. Oct 31 1998
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A new short chain RGD-containing disintegrin, accutin, inhibits the common pathway of human platelet aggregation. Nov 27 1998

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Structure of an acidic phospholipase A2 from the venom of *Deinagkistrodon acutus*. Jan 2002
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Blinexin, a snake C-type lectin from *Agkistrodon bilineatus* venom agglutinates platelets via GPIb and alpha2beta1. Nov 2001
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Crystallization and preliminary X-ray analysis of jarahagin, a metalloprotease/disintegrin from *Bothrops jararaca* snake venom. Aug 2001
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Aggrafin, a heteroictinomeric C-type lectin from *Calloselasma rhodostoma* (malayan pit viper), stimulates platelets by binding to alpha 2beta 1 integrin and glycoprotein Ib, activating Syk and phospholipase Cgamma 2, but does not involve the glycoprotein VIIc receptor gamma chain collagen receptor. Jun 15 2001
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11282287 PMID: 11368309
Chimeric derivative of fibrolase, a fibrinolytic enzyme from southern copperhead venom, possesses inhibitory activity on platelet aggregation. Dec 15 2000
- 26/51 (Item 51 from file: 155) 11254575 PMID: 11341935
Molecular characterization of -amino acid oxidase from *Agkistrodon haysi bimhoffi* with special reference to platelet aggregation. Jan 12 2001
- 26/52 (Item 52 from file: 155) 11164739 PMID: 11181425
Pharmacological characterization and antithrombotic effect of agkistin, a platelet glycoprotein Ib antagonist. Feb 2001
- 26/53 (Item 53 from file: 155) 11163086 PMID: 11159446
Toward understanding heterofacial activation of secretory phospholipase A2 (PLA2); membrane surface properties and membrane-induced structural changes in the enzyme contribute synergistically to PLA2 activation. Feb 2001
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Purification, characterization, and cDNA sequence of hayselin, a disintegrin-like/cysteine-rich protein from the venom of *Agkistrodon halys* Pallas. Nov 11 2000
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Characterization and cDNA cloning of a platelet aggregation inhibitor. Aug 31 2000
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Isolation of a proteinase with plasminogen-activating activity from *Lachesis muta muta* (bushmaster) snake venom. Jun 1 2000
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Primary structure and functional characterization of biloxin-1, a novel dimeric P-II snake venom metalloproteinase from *Agkistrodon bilineatus* venoms. Jun 1 2000
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Hemostatic disturbances observed in patients with snakebite in south China. Oct 2000
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Phospholipase A(2) with platelet aggregation inhibitor activity from *Austrelaps superbus* venom: protein purification and cDNA cloning. Mar 15 2000
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Molecular cloning and functional expression of contortrostatin, a homodimeric disintegrin from southern copperhead snake venom. Oct 1999
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Purification and characterization of the venom phospholipases A2 from Asian monotypic *crotalinae* snakes. Oct 1999
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Effects of ATP on ligand recognition of platelet fibrinogen receptor on GPIIb-IIIa. Sep 1994
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[Experimental study of Chinese *Agkistrodon acutus* venom in activation of rabbit platelets *in vivo*] Mar 1994
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[The antithrombotic action of a protein C activator from the venom of *Agkistrodon bimhoffi ussurensis* in thrombus formation in an extracorporeal shunt in rats]. Antithrombotic deinstile aktivator prolema C1 z rada Agkistrodon bimhoffi ussurensis pri tromboobrazov vektoru corporafrom shuntu u krys. Mar-Apr 1994
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Purification and characterization of platelet aggregation inhibitors from snake venoms. Jan 1 1994
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Prevention of experimental carotid artery thrombosis by aplaggin. Nov 1993
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Protein C activator from the venom of *Agkistrodon bimhoffi ussurensis* retards thrombus formation in the arterio-venous shunt in rats. Jun 1 1993
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[Abeta 2 meagabgabu inhibits the activation of rabbit platelet by Chinese *Agkistrodon acutus* venom] Sep 1992
Spreading of platelets on fibrin is mediated by the amino terminus of the beta chain including peptide beta15-42. May 1 1993
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Kistrin, an integrin antagonist, blocks endocytosis of fibrinogen into guinea pig megakaryocyte and platelet alpha-granules. Jan 1993
- 26/70 (Item 70 from file: 155) 09584026 PMID: 8423228
A novel alpha-type fibrinogenase from *Agkistrodon rhodostoma* snake venom. Dec 28 1992
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A novel alpha-type fibrinogenase from *Agkistrodon rhodostoma* snake venom. Dec 28 1992
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Arg-Gly-Asp-dependent occupancy of GPIIb/IIIa by aplaggin: evidence for internalization and cycling of a platelet integrin. Jan 1 1993
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A common precursor for a putative hemomaggic protein and rhodostomin, a platelet aggregation inhibitor of the venom of *Calloselasma rhodostoma*: molecular cloning and sequence analysis. Dec 16 1991
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Halysin, an antiplatelet Arg-Gly-Asp-containing snake venom peptide, as fibrinogen receptor antagonist. Aug 22 1991
In vivo fibrinolysis results in markedly decreased amounts of fibrinogen in rat megakaryocytes and platelets. Dec 1990
- 26/76 (Item 76 from file: 155) 08813259 PMID: 1900221
Kistrin, a polypeptide platelet GPIIb/IIIa receptor antagonist, enhances and sustains coronary arterial thrombosis with recombinant tissue-type plasminogen activator in a canine preparation. Mar 1991
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In vivo fibrinolysis results in markedly decreased amounts of fibrinogen in rat megakaryocytes and platelets. Dec 1990
- 26/78 (Item 78 from file: 155) 08583361 PMID: 2365298
Binding of the snake venom-derived proteins aplaggin and echistatin to the arginine-glycine-aspartic acid recognition site(s) on platelet glycoprotein IIb/IIIa complex inhibits receptor function. Jul 15 1990
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Platelet glycoprotein IIb-IIIa protein antagonists from snake venoms: evidence for a family of platelet-aggregation inhibitors. Apr 1990
- 26/80 (Item 80 from file: 155) 08350129 PMID: 253046
Platelet aggregation is stimulated by lactose-inhibitable snake venom lectins. Sep 29 1989
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Agkistrodon piscivorus platelet aggregation inhibitor: a potent inhibitor of platelet activation. Oct 1989
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Isolation of an acidic phospholipase A2 from the venom of *Agkistrodon acutus* (five piece snake) and its effect on platelet aggregation. 1989
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The primary structure of rat platelet phospholipase A2. Nov 1988
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Comparison of the platelet aggregation induced by three thrombin-like enzymes of snake venoms and thrombin. Apr 8 1988
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Venom from southern copperhead snake (*Agkistrodon contortrix contortrix*). II. A unique phospholipase A2 that induces platelet aggregation. Aug 1985

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Venom from southern copperhead snake (*Agkistrodon contortrix contortrix*). I. Characterization of a protease that preferentially releases fibronectin peptide B. 1987
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Characterization of the structure and function of three phospholipases A2 from the venom of *Agkistrodon halys pallas*. 1987
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Platelet aggregation inhibitors from *Agkistrodon acutus* snake venom. 1986
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Mechanism of action of the platelet aggregation inhibitor purified from *Agkistrodon halys (manusii)* snake venom. 1984
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A potent platelet aggregation inhibitor purified from *Agkistrodon halys (manusii)* snake venom. 1983
- 26/73 (Item 93 from file: 155) 04934166 PMID: 153013
In vivo effects of the purified thrombin-like and anticoagulant principles of *Agkistrodon acutus* (hundred pace snake) venom. 1978
- 26/74 (Item 94 from file: 155) 04324866 PMID: 553986
Effect of defibrination on tumor growth and chemotherapy. Oct 1976
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Activity against clotting and platelet aggregation of the anticoagulant fraction of venom from *Agkistrodon rhodostoma* [Activity anticoagulante antiagregante piastinica della frazione anticoagulante del veneno di *Agkistrodon rhodostoma*]. Oct 31 1975
- 26/76 (Item 1 from file: 5) 0014722195 BIOSIS NO.: 20040090964
Purification and characterization of phospholipase A2 homologue from the manushi (*Agkistrodon blomhoffi ussurensis*) snake venom. 2003
- 26/77 (Item 2 from file: 5) 0014677742 BIOSIS NO.: 20040058499
Purification and characterization of the fibrinolytic enzyme from *Agkistrodon halys halys* venom. 2002
- 26/78 (Item 3 from file: 5) 0014538037 BIOSIS NO.: 2003049594
A tetrameric glycoprotein I β -binding protein, aggucelin, from Fornosan pit viper. Structure and interaction with human platelets. 2003
- 26/79 (Item 4 from file: 5) 0014535951 BIOSIS NO.: 20030493608
Pediatric rattlesnake envenomation with neurotoxicity refractory to treatment with crotalins Fab antivenom. 2003
- 26/80 (Item 5 from file: 5) 0013699534 BIOSIS NO.: 200200293045
Diagnostic uses of snake venom 2001
- 26/81 (Item 6 from file: 5) 0013335343 BIOSIS NO.: 20010525482
A novel tetrodotoxin-like venom protein, aggucelin, from *Agkistrodon acutus* acts as a glycoprotein I β agonist. 2001
- 26/82 (Item 7 from file: 5) 0013000073 BIOSIS NO.: 20010171912
Identification of key residues responsible for enzymatic and platelet aggregation-inhibiting activities of acidic phospholipase A2S from *Agkistrodon halys* Pallas 2001
- 26/83 (Item 8 from file: 5) 0012701086 BIOSIS NO.: 200000419399
Contorstolatin, a snake venom disintegrin, induces alpha β 1 α 3-mediated tyrosine phosphorylation of CAS and FAK in tumor cells 2000
- 26/84 (Item 9 from file: 5) 0012648732 BIOSIS NO.: 200000367045
Expression and purification of recombinant salmosin, a potent platelet aggregation inhibitor in *Pichia pastoris* 2000
- 26/85 (Item 10 from file: 5) 0011974615 BIOSIS NO.: 1999000234275
Recurrent and persistent coagulopathy following pit viper envenomation 1999
- 26/86 (Item 11 from file: 5) 0011942260 BIOSIS NO.: 199900201910
The interaction of anurod with human platelets 1999
- 26/87 (Item 12 from file: 5) 0011875214 BIOSIS NO.: 199900134874
Structure of a snake venom phospholipase A2 inhibited by β -bromo-phenacyl-bromide 1998
- 26/88 (Item 13 from file: 5) 0011853015 BIOSIS NO.: 199900122675
Platelet aggregation inhibitors from *Agkistrodon acutus* snake venom. 1986
- 26/89 (Item 14 from file: 5) 0011862612 BIOSIS NO.: 199900122272
The treatment of acute renal failure following manushi bite by hemofiltration and hemodialfiltration 1998
- 26/90 (Item 15 from file: 5) 0011710736 BIOSIS NO.: 199900505042
Analysis of the patient platelet glycoprotein I β -IIa antagonist from natural sources 1998
- 26/91 (Item 16 from file: 5) 0011238647 BIOSIS NO.: 199800029894
Application of recombinant rhodostomin in studying cell adhesion 1997
- 26/92 (Item 17 from file: 5) 0010651733 BIOSIS NO.: 199798265733
Snake venom proteins modulating the interaction between von Willebrand factor and platelet glycoprotein I β 1996
- 26/93 (Item 18 from file: 5) 0010376491 BIOSIS NO.: 199693010551
Characterisation of platelet aggregation induced by PC-3 human prostate adenocarcinoma cells and inhibited by venom peptides, trigrammin and rhodostomin 1996
- 26/94 (Item 19 from file: 5) 0010206380 BIOSIS NO.: 199698674213
Crystal structure of an acidic phospholipase A2 from the venom of *Agkistrodon halys halys* at 2.0 Å resolution 1996
- 26/95 (Item 20 from file: 5) 0010040262 BIOSIS NO.: 199598508095
Do we know the complete sequence of metalloproteinase and nonenzymatic platelet aggregation inhibitor (disintegrin) precursor proteins? 1995
- 26/96 (Item 21 from file: 5) 0009856409 BIOSIS NO.: 199598321882
Functional and sequence characterization of agicetin, a new glycoprotein IB antagonist isolated from *Agkistrodon acutus* venom 1995
- 26/97 (Item 22 from file: 5) 0009347328 BIOSIS NO.: 199497485614
Halystatin, a novel disintegrin from *Agkistrodon halys*, is a potent inhibitor of bone resorption and platelet aggregation 1994
- 26/98 (Item 23 from file: 5) 0009342054 BIOSIS NO.: 199497363789
Antithrombotic action of the protein C activator from the venom of *Agkistrodon blomhoffi ussurensis* upon thrombosis in the extracorporeal sh in rats 1994
- 26/99 (Item 24 from file: 5) 0009057945 BIOSIS NO.: 199497079230
Synthetic RGD peptides derived from the adhesive domains of snake-venom proteins: Evaluation as inhibitors of platelet aggregation 1993
- 26/100 (Item 25 from file: 5) 0008894010 BIOSIS NO.: 199396058426
Interpretation of low postmortem concentrations of enhanc 1993
- 26/101 (Item 26 from file: 5) 0008802114 BIOSIS NO.: 199395104380
Binding interactions of Kunitz with platelet glycoprotein I β -IIIa: Analysis by site-directed mutagenesis 1993
- 26/102 (Item 27 from file: 5) 0008751652 BIOSIS NO.: 199395053918
Experimental studies on the mode and amount of Svera-3 administration in thrombolytic therapy 1992
- 26/103 (Item 28 from file: 5) 0008557505 BIOSIS NO.: 19934506015
Binding of factor VIII to platelets is inhibited by phosphatidylserine-binding proteins from snake venoms 1992
- 26/104 (Item 29 from file: 5) 0008131008 BIOSIS NO.: 199243099599
EFFECTIVENESS OF ARGININE LIPIDASE SEVATE SEPARATED FROM ZHEJIANG CHINA MAMUSHI AGKISTRODON-BLOMHOFFI-BREVICAUDUS VENOM APPLIED FOR THE TREATMENT OF 3323 CASES OF CEREBRAL THROMBOSIS 1991
- 26/105 (Item 30 from file: 5) 000881814019 BIOSIS NO.: 199192059730
CRYSTALS OF A PLATELET AGGREGATION INHIBITOR THE ACIDIC PLA-2 FROM THE VENOM OF AGKISTRODON-HALYS-PALLAS 1991
- 26/106 (Item 31 from file: 5) 000870644 BIOSIS NO.: 19924309325
PURIFICATION AND CHARACTERIZATION OF THREE PLATELET AGGREGATION INHIBITORS 1992
- 26/107 (Item 32 from file: 5) 00087814019 BIOSIS NO.: 199192059730
IDENTIFICATION OF 50 kDa SNAKE VENOM PROTEINS WHICH SPECIFICALLY INHIBIT PLATELET ADHESION TO COLLAGEN 1991
- 26/108 (Item 33 from file: 5) 0007309326 BIOSIS NO.: 199090053805
BINDING OF THE SNAKE VENOM-DERIVED PROTEINS APPAGGIN AND ECHISTATIN TO THE ARGININE GLYCINE ASPARTIC ACID RECOGNITION SITES ON PLATELET GLYCOPROTEIN I β GLYCOPROTEIN I β II COMPLEX INHIBITS RECEPTOR FUNCTION 1990
- 26/109 (Item 34 from file: 5) 0006807724 BIOSIS NO.: 198988122839
HEMATOLOGICAL STUDIES ON NATURALLY OCCURRING SUBSTANCES II. EFFECTS OF ANIMAL CRUDE DRUGS ON BLOOD COAGULATION AND FIBRINOLYSIS SYSTEMS 1989
- 26/110 (Item 35 from file: 5) 0005473181 BIOSIS NO.: 198733079786

THE EFFECTS OF THE VENOM OF AGKISTRODON -HALYS PALLAS FROM ZHEJIANG CHINA ON HUMAN PLATELET AGGREGATION

1986
26/1311 (Item 36 from file: 5) 0005173864 BIOSIS NO.: 198682020251
INHIBITION OF RABBIT PLATELET AGGREGATION BY ALPHA FIBRINOGENASE PURIFIED FROM CALLOSELSAMA-RHODOSTOMA MALAYAN PIT VIPER VENOM 1985

26/1322 (Item 37 from file: 5) 0004638996 BIOSIS NO.: 198579057895
RABBIT PLATELET CALCIUM ATPASE DIFFERS FROM THE HUMAN ERYTHROCYTE CALCIUM MAGNESIUM ATPASE IN ITS RESPONSE TO 3 PURIFIED PHOSPHOLIPASES A-2: EXOGENOUS PHOSPHOLIPIDS AND CALMODULIN 1984

26/1323 (Item 38 from file: 5) 0004312578 BIOSIS NO.: 198478047985
MECHANISM OF ACTION OF THE PLATELET AGGREGATION INHIBITOR PURIFIED FROM AGKISTRODON -HALYS SNAKE VENOM 1984

26/1324 (Item 39 from file: 5) 0004173572 BIOSIS NO.: 198477005483
THE EFFECT OF THE DEFB3EASE OF AGKISTRODON -ACUTUS VENOM ON BLOOD COAGULATION SYSTEM IN RABBITS BOTH IN VITRO AND IN-VIVO 1982

26/1325 (Item 40 from file: 5) 0003663225 BIOSIS NO.: 198375052168
DE FIBRINATION WITH ANCROD IN GLOMERULO NEPHRITIS EFFECTS ON CLINICAL AND HISTOLOGIC FINDINGS AND ON BLOOD COAGULATION 1982

26/1326 (Item 41 from file: 5) 0003791297 BIOSIS NO.: 198325050240
MODULATION OF ERYTHROCYTE AND PLATELET CALCIUM II MAGNESIUM II ATPASE ACTIVITIES BY ACIDIC NEUTRAL AND BASIC PHOSPHO LIPASES A-2 CALMODULIN AND BY DIFFERENT PHOSPHO LIPIDS INCLUDING PLATELET ACTIVATING FACTOR 1983

26/1327 (Item 42 from file: 5) 0003216172 BIOSIS NO.: 198171035131
CHARACTERISTICS OF A THROMBIN-LIKE SUBSTANCE SNAKE VENOM ANCROD AGKISTRODON -RHODOSTOMA FROM THE VIEWPOINT OF COAGULATION FIBRINOLYSIS 1980

26/1328 (Item 43 from file: 5) 0003050734 BIOSIS NO.: 198070082221 STUDIES ON COAGULATION FIBRINOLYTIC ACTIVITY OF SNAKE VENOMS 1979

26/1329 (Item 44 from file: 5) 0001037164 BIOSIS NO.: 197309023641
PLASMA FIBRINOGEN RECOVERY RATE AFTER ADMINISTRATION OF MALAYAN PIT VIPER VENOM EXTRACTS IN NONSTRESSED AND SURGICALLY STRESSED ANIMALS 1972

27/113 (Item 13 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14423333 PMID: 10417418
CRYSTALLIZATION AND PRELIMINARY DIFFRACTION DATA OF A PLATELET-AGGREGATION INHIBITOR FROM THE VENOM OF AGKISTRODON PISCIVORUS 1972

27/113 (Item 14 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14423333 PMID: 10417418
Acta crystallographica. Section D, Biological crystallography (DENMARK) Aug 1999, 55 (Pt 8) p1468-70.
ISSN 0907-4449 Journal Code: 9305878 Contract/Grant No.: HL26942; HL_NHLBI Document type: Journal Article

Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
Applaggin (Agkistrodon piscivorus platelet aggregation inhibitor) is a potent inhibitor of blood platelet aggregation derived from the venom of the North American water moccasin. The protein consists of 71 amino acids, is rich in cysteines, contains the sequence-recognition site of adhesion proteins at positions 50-52 (Arg-Gly-Asp) and shares high sequence homology with other snake-venom disintegrins such as echistatin, kistrin and trigramin. Single crystals of applaggin have been grown and X-ray diffraction data have been collected to a resolution of 3.2 Å. The crystals belong to space group P4(1)2(1)2 (or its enantiomorph), with unit-cell dimensions $a = b = 63.35$, $c = 74.18$ Å and two molecules per asymmetric unit. Molecular replacement using models constructed from the NMR structures of echistatin and kistrin has not been successful in producing a trial structure for applaggin. Record Date Created: 19990923 Record Date Completed: 19990923

27/114 (Item 14 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14412840 PMID: 10405663
Molecular cloning and functional characterization of a snake venom metalloprotease
Jeon O H; Kim D S
Department of Biochemistry, College of Science, and Bioproducts ResearchCenter, Yonsei University, Seoul, Korea.
European journal of biochemistry / FEBS (GERMANY) Jul 1999, 263 (2) p52-53 ISSN 0014-2956 Journal Code: 0107600
Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
A cDNA clone, MT-d-I, encoding metalloprotease precursor was isolated from snake (Agkistrodon halys brevicaudus) venom gland cDNA library. MT-d-I protein containing both metalloprotease and disintegrin domains, and MT-d-II protein containing the metalloprotease domain only were expressed in Escherichia coli and refolded successfully into their functional forms. Each of the refolded enzyme species exhibited distinct substrate specificity. Proteolytic activity of the MT-d-I protein having metalloprotease activity was also able to inhibit platelet aggregation. Functionally active MT-d-I protein underwent autoproteolytic processing in vitro to

produce metalloprotease and disintegrin; this processing was accompanied by significant changes in the substrate specificity of the enzyme activity. Experimental evidence strongly suggests that the disintegrin domain in the metalloprotease precursor modulates the catalytic function of the enzyme in hydrolysing extracellular matrix proteins. Record Date Created: 19990826 Record Date Completed: 19990826

27/115 (Item 15 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14391244 PMID: 10484740
Primary structure and biological activity of snake venom lectin (APL) from Agkistrodon p. piscivorus (Eastern cottonmouth Toxicon - official journal of the International Society on Toxicology (ENGLAND) Jul 1999, 37 (7) p1053-64 ISSN 0041-0

Journal Code: 1307333 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
A lectin (APL) was purified from the venom of Agkistrodon piscivorus (Eastern cottonmouth moccasin). APL is a disulfide-linked, homodimeric protein consisting of identical monomers of molecular weight 16,200. Native rabbit and human erythrocytes were agglutinated by APL and the activity was found to be calcium-dependent. Galactose, lactose, rhamnose and EGTA strongly inhibited the hemagglutination activity of APL. The complete amino acid sequence determined by Edman sequencing of the Spyridylethylated derivative, and its peptides derived from enzymatic digestion indicate the structure of APL be highly homologous with lectins and the platelet glycoprotein Ib (GP1b)-binding protein isolated from other snake venoms. These results suggest that APL belongs to the C-type beta-galactoside binding lectin family which possess structural similarity with the C-terminal carbohydrate-recognition domain (CRD) of animal membrane lectins. Record Date Created: 19990903 Record Date Completed: 19990903

27/117 (Item 17 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14182047 PMID: 9880793
Usuristatin 2, a novel KGD-bearing disintegrin from Agkistrodon ussuriensis venom
Oshikawa K; Terada S
Department of Chemistry, Faculty of Science, Fukuoka University, Jonan-ku, Fukuoka, 814-0180, Japan.

Journal of biochemistry (JAPAN) Jan 1999, 125 (1) p31-5 ISSN 0021-924X Journal Code: 0376600
Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
Two platelet aggregation inhibitors, usuristatin 1 (US-1) and 2 (US-2), were newly isolated from the venom of Chinese viper Agkistrodon ussuriensis by SP-Toyopearl 650M column chromatography and reverse-phase HPLC. The Ms of these polypeptides were estimated to be about 8,000 by SDS-PAGE. Analytical gel filtration revealed that US-2 exists as a dimer. Both polypeptides comprised 71 amino acids, whose sequences showed high similarities to those of other disintegrins. US-1 had a typical Arg-Gly-Asp (RGD) sequence, which is responsible for blocking the binding of fibrinogen to the receptor. In US-2, the corresponding sequence was Lys-Gly-Asp (KGD). US-1 strongly suppressed platelet aggregation induced by ADP, collagen, thrombin, and sphingomyelin with IC₅₀ = 17.33 nM. US-2 also inhibited the platelet aggregation, but the IC₅₀s were about ten times higher. US-1 also dose-dependently inhibited the adhesion of human melanoma cells to fibrinogen and fibronectin, while US-2 did not inhibit the cell adhesion to fibronectin. This indicates that the KG-bearing disintegrin is a specific inhibitor for the fibrofoge receptor. Record Date Created: 19990429 Record Date Completed: 19990429

27/120 (Item 20 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.

14142448 PMID: 9838213
A new short chain RGD-containing disintegrin, accutin, inhibits the common pathway of human platelet aggregation. Yeh C H; Peng H C; Yih J B; Huang T F
Pharmacological Institute, College of Medicine, National Taiwan University, No. 1, Sec. 1, Jen-Ai Rd, Taipei, Taiwan.
Biocimica et biophysica acta (NETHERLANDS) Nov 27 1998, 1425 (3) p493-504 ISSN 0006-3007 Journal Code: 02175
Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
A new short-chain disintegrin, accutin, was purified from the Formosan Agkistrodon acutus venom by using of gel filtration, ion exchanger and reverse phase HPLC. The homogeneous protein is a 47-residue polypeptide with a molecular mass of 5241 D containing an Arg-Gly-Asp sequence and seven cysteiny1 residues at positions highly homologous to other disintegrins. Accutin dose-dependently inhibited human platelet aggregation stimulated by ADP, collagen, thrombin or the thromboxane analogue U46619 in platelet suspension with IC₅₀ values of 66-267 nM. It was also active in inhibiting platelet aggregation of platelet-1I plasma. However, accutin apparently did not affect the shape change caused by these agonists. Accutin also inhibited fibrinogen-induced aggregation of human elastase-treated platelets in dose-dependent manner. Furthermore, accutin dose-dependent inhibited the binding reaction of fluorescein isothiocyanate (FITC)-conjugated arlein, a member of the disintegrin family, to human platelets. In addition, the binding of FITC-conjugated accutin to platelets was almost completely blocked by a monoclonal antibody, 7E3, raised against the platelet glycoprotein Ib/IIa complex. On the other hand, accutin as well as other disintegrins rhodostomin and arlein, exhibited an inhibitory effect on 7E3 binding toward platelets and endothelial cells in a dose-dependent manner. It is concluded that accutin, a new platelet aggregation inhibitor belonging to the short-chain disintegrin family, acts specifically on a binding epitope of GPIIb/IIIa overlapping with that of 7E3, leading to the blockade of fibrinogen binding to its receptor. Record Date Created: 19990128 Record Date Completed: 19990128

- 25/23 (Item 23 from file: 155) DIALOG(R)File 155.MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.
 14021913 PMID: 9720222
 Purification and molecular cloning of a platelet aggregation inhibitor from the snake (*Agkistrodon halys brevicaudus*) venom.
 Kang C; Chung K H; Lee S J; Yun Y; Moon H M; Kim D S
 Thrombosis research (UNITED STATES) Jul 15 1988; 91 (2) p65-73. ISSN 0049-3848 Journal Code: 0326377
 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
 A platelet glycoprotein IIb-IIIa (GP IIb-IIIa) antagonist, salmosin, was purified to homogeneity from Korean snake (*Agkistrodon halys brevicaudus*) venom by means of chromatographic fractionations. We have isolated the cDNA encoding salmosin by using the cDNA library of the snake venom gland and analyzed its complete nucleotide sequence. The molecular identity was confirmed by comparison of the deduced amino acid sequence with the directly determined primary structure of salmosin. This protein is a single-chain polypeptide composed of 73 amino acids including 12 cysteines as well as the sequence Arg-Gly-Asp, a proposed recognition site of adhesive proteins. The primary sequence of salmosin shows considerable homology to previously described proteins of snake venom GP IIb-IIIa antagonist family. A molecular mass of 7474 for the protein was determined by matrix-assisted laser desorption ionization mass spectrometry. Salmosin inhibits GP IIb-IIIa binding to immobilized fibrinogen with an IC₅₀ of 2.2 nM and ADP-induced platelet aggregation with an IC₅₀ of 131 nM, respectively. This work demonstrates the purification, characterization, and cDNA cloning of salmosin, a platelet aggregation inhibitor that may have therapeutic potential as an antithrombotic agent. Record Date Created: 19981120 Record Date Completed: 19981120 Tags: Human; Support; Non-U S; Govt Descriptors: *Crotalid Venoms-chemistry; -OH; *Platelet Aggregation Inhibitors--isolation and purification--IP; Amino Acid Sequence; Animals; Cloning; Molecular; Crotalid Venoms--genetics--GE; Crotalid Venoms--isolation and purification--IP; DNA Complementarity--genetics--GE; Molecular Sequence Data; Platelet Aggregation--effects--DE; Platelet Aggregation Inhibitors--pharmacology--PD; Platelet Glycoprotein IIb-IIIa Complex--antagonists and inhibitors--AI; Proteins--genetics--GE; Proteins--isolation and purification--IP; Proteins--pharmacology--PD; CAS Registry No.: 0 (Crotalid Venoms); 0 (DNA Complementary); 0 (Platelet Aggregation Inhibitors); 0 (Platelet Glycoprotein IIb-IIIa Complex); 0 (Proteins); 0 (salmosin); 0 (salmosin))
- 27/75 (Item 25 from file: 155) DIALOG(R)File 155.MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.
 10855721 PMID: 10987142
 Characterization and cDNA cloning of a platelet aggregation inhibitor.
 Koh Y S; Kim D S
 Department of Biochemistry, College of Science, Yonsei University, Seoul, Korea.
 Molecules and cells (KOREA (SOUTH)) Aug 31 2000; 10 (4) p37-42. ISSN 10-16-8478 Journal Code: 9610936
 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
 A novel platelet aggregation inhibitor, sal-C, was purified to homogeneity from the venom of Korean snake (*Agkistrodon halys brevicaudus*). Several lines of experimental evidence clearly indicated that sal-C inhibits not only the collagen-induced platelet aggregation, but also the aggregation mediated by the cell surface glycoprotein IIb-IIIa (GP IIb-IIIa). We have isolated the cDNA encoding sal-C from the cDNA library of the snake venom gland and analyzed its complete nucleotide sequence. Sal-C is a single-chain polypeptide composed of 212 amino acids including 24 cysteines. The deduced polypeptide sequence of sal-C demonstrated considerable homology to previously described protein species of the collagen-induced platelet aggregation inhibitor family. Sal-C does not have the Arg-Gly-Asp (RGD) motif, but contains the Ser-Glu-Cys-Asp sequence. Interestingly, sal-C was found to inhibit GP IIb-IIIa binding to immobilized fibrinogen which is antagonized by the typical RGD motif of disintegrins. Record Date Created: 20001018 Record Date Completed: 20001018
- 27/65 (Item 65 from file: 155) DIALOG(R)File 155.MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.
 10067107 PMID: 87178312
 Purification and characterization of platelet aggregation inhibitorsfrom snake venoms
 Trikha M; Roje W E; Manley P J; Lucchesi B R; Markland F S
 Department of Biochemistry and Molecular Biology, University of Southern California, School of Medicine, Los Angeles 90033. Thrombosis research (UNITED STATES) Jan 1 1994; 73 (1) p39-52. ISSN 0049-3848 Journal Code: 0326377
 Contract/Grant No.: HL19782-15; HL; NHBLI; R03CAS4861; CA; NCI Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
 Proteins that inhibit glycoprotein (GP) IIb-IIIa mediated platelet aggregation have been purified from the venom of two snake species. A small platelet aggregation inhibitor (p1-1A1), multisquamatin (Mr = 5,700), was purified from *Echis multicinctus* venom by hydrophobic interaction HPLC and two steps on C18 reverse phase HPLC. A larger p1-A1, contortostatin (Mr = 15,000), was purified by a similar HPLC procedure from the venom of *Agkistrodon contortrix contortrix*. Both p1-A1s inhibit ADP-induced human, canine and rabbit platelet aggregation using platelet rich plasma (PRP). Multisquamatin has an IC₅₀ of 97 nM, 281 nM and 353 nM for human, canine and rabbit PRP, respectively. In a competitive binding assay using 125I-T-E3 (a monoclonal antibody to GPIIb/IIIa that inhibits platelet aggregation) both contortostatin and multisquamatin demonstrated GPIIb/IIIa specific binding to human and canine platelets. The IC₅₀ for contortostatin displacement of T-E3 binding to human and canine GPIIb/IIIa is 27 nM and 16 nM, respectively and for multisquamatin it is 3 nM and 63 nM, respectively. Our results indicate that both p1-A1s inhibit platelet aggregation by binding with high affinity to GPIIb/IIIa. Record Date Created: 19940606 Record Date Completed: 19940606
- 27/77 (Item 79 from file: 155) DIALOG(R)File 155.MEDLINE(R) (c) format only 2004 The Dialog Corp. All its. reserv.
 08484100 M : 2320569

- Platelet glycoprotein IIb-IIIa protein antagonists from snake venoms: evidence for a family of platelet-aggregation inhibitors.
 Dennis M S; Henze W J; Pitti R M; Lipari M T; Napier M A; Deshler T A; Bunting S; Lazarus R A
 Department of Biomolecular Chemistry, Genentech, Inc., South San Francisco, CA 94080.
 Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Apr 1990; 87 (7) p247-5. ISSN 0027-8242 Journal Code: 7505876 Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: Completed
 The purification, complete amino acid sequence, and biological activity are described for several homologous snake venom proteins that are platelet glycoprotein (GP) IIb-IIIa antagonists and potent inhibitors of platelet aggregation. The primary structure of kistrin (from *Agkistrodon rhodostoma*), bitan (from *Bitis arietans*), three isoforms of trigrinin (from *Trimeresurus gramineus* and an isoform of echistatin (from *Echis carinatus*) were determined by automated sequence analysis and fast atom bombardment mass spectrometry analysis. Each of the protein in this family, which range from 47 to 83 residues, contains an Arg-Gly-Asp amino acid sequence found in protein ligands that binds to GPIIb-IIIa, a high (17 +/- 1%) cysteine content conserved in the primary sequence, and a homologous N-terminal region absent only in the echistatin isoforms. Each protein directly inhibits the interaction of purified platelet GPIIb-IIIa to immobilized fibrinogen about 100 times more effectively than does the pentapeptide Gly-Arg-Gly-Asp-Ser. The IC₅₀ value for the inhibition of platelet aggregation, using human platelet-rich plasma stimulated with ADP, ranges from 110 to 550 nM for the various proteins, about 1000-fold more potent than Gly-Arg-Gly-Asp-Ser. Kistrin binds reversibly to both resting and ADP-activated human platelets with high affinity (Kd = 10.8 nM/kg) into rabbits reversibly inhibits platelet aggregation ex vivo over 30 min without induction of thrombocytopenia. We propose that these proteins are members of a general class of proteins found in the venom of pit vipers that inhibit platelet aggregation antagonism of the GPIIb-IIIa-fibrinogen interaction and as such serve as potential antithrombotic agents. Record Date Create 19900504 Record Date Completed: 19900504
- 27/7105 (Item 10 from file: 5) DIALOG(R)File 5/Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 0011974615 BIOSIS NO.: 199300234275 Recurrent and persistent coagulopathy following pit viper envenomation
 AUTHOR: Boyer Leslie V (Reprint); Seifert Steven A; Clark Richard F; McNally Jude T; Williams Sarayn R; Nordt Sean P; Walter Frank G; Dart Richard C
 AUTHOR ADDRESS: Department of Pediatrics, University of Arizona Health Sciences Center, Tucson, AZ, USA**USA
 JOURNAL: Archives of Internal Medicine 159 (7) : p706-710 April 12, 1999
 MEDIUM: print ISSN: 0003-9926 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English
 ABSTRACT: Background: Coagulation abnormalities following crotaline (pit viper) snakebite have traditionally been considered short-lived, but laboratory studies have rarely been reported beyond the first few days of treatment for envenomation. During the course of an antivenom clinical trial, we observed coagulation defects as late as 2 weeks following envenomation. Objectives: document and characterize the recurrence or persistence of coagulopathy among patients envenomed by pit vipers and treat with a Fab antivenom. Methods: Patients with moderate pit viper envenomation were enrolled in a multicenter, prospective clinical trial. A Fab-based antivenom preparation, antivenom polyvalent crotalid (ovine) Fab, was administered in all cases. Platelet coagulation level, presence of fibrin split products, prothrombin time, and partial thromboplastin time were determined before treatment and at standard intervals during the following 2 weeks. Results: Of 38 patients completing the study, 20 (55%) had recurrent, persistent, or late coagulopathy 2 to 14 days after envenomation. Thrombocytopenia occurred in patients with prior thrombocytopenia, hypofibrinogenemia occurred only in those with prior hypofibrinogenemia or positive fibrin split products. No patient experienced significant spontaneous bleeding. Conclusions: Prolonged or recurrent coagulopathy may benefit from periodic rather than single-bolus dosing. Patients with coagulopathy should undergo close monitoring during the first 2 weeks after snakebite.
- 27/7109 (Item 14 from file: 5) DIALOG(R)File 5/Biosis Previews(R) (c) 2004 BIOSIS. All its. reserv.
 0011862612 BIOSIS NO.: 199900122272 The treatment of acute renal failure following manushi bite by hemodialfiltration
 AUTHOR: Yamasaki Atsuyuki (Reprint)
 AUTHOR ADDRESS: Dep. Urol., Mitsui Public Gen. Hosp., Mitsui, Japan**
 JOURNAL: Nagasaki Igakka Zasshi 73 (3) : p97-100 Sept.; 1988 1988 MEDIUM: print ISSN: 0369-3228
 DOCUMENT TYPE: Article RECORD TYPE: Article RECORD LANGUAGE: Japanese
 ABSTRACT: A case of the treatment of acute renal failure caused rhabdomyolysis due to the venom poisoning by *Agkistrodon halys Blomhoffi* (manushi) is reported. The fatal rate of manushi bite poisoning is rare. However, about 0.2% of the patients died of the fatal causes are acute renal failure, it is important to treat for renal failure. A 66-year-old man was admitted because acute renal failure due to manushi bite. From his left arm, chest wall to abdomen were swelling due to manushi bite, these skin was changed to red wine color. Significant laboratory data was: white blood count (WBC) 16,000/ml; platelet 12.9 X 10⁴/ml; urea nitrogen (BUN) 62 mg/dl; serum creatinine 4.6 mg/dl; glutamate oxaloacetic transaminase (GOT) 1270U; glutamate pyruvate transaminase (GPT) 383U; lactate dehydrogenase (LDH) 4460U; creatine phosphokinase (CPK) 4740U; serum myoglobin 70000ng/ml. Furthermore, general condition was not so good, he stood at oliguria and dyspnea. The patient presented rhabdomyolysis and acute renal failure, and underwent hemodialfiltration and hemodialfiltration. After treatment, he

recovered his renal function and had a good clinical course. Hemofiltration and hemodiafiltration are safe, it was considered that these treatments are useful to improve myoglobinuria.

- 27/110 (Item 15 from file: 5) DIALOG(R)File 5:Biosis Preview(R) (c) 2004 BIOSIS. All its. reserv.
0011710795 BIOSIS NO.: 199800506042
Analysis of the potent platelet glycoprotein IIb-IIIa antagonist from natural sources
AUTHOR: Kang In-Cheol; Kim Doo-Sik (Reprint)
AUTHOR ADDRESS: Dep. Biochemistry, Coll. Sci., Yonsei Univ., Seoul 120-749, South Korea**South Korea
JOURNAL: Journal of Biochemistry and Molecular Biology 31 (5): p615-518 Sept. 30, 1998 MEDIUM: print
ISSN: 1225-8687 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English
ABSTRACT: Adhesive interaction of the platelet glycoprotein IIb-IIIa (GP IIb-IIIa) with a plasma protein, such as fibrinogen, plays an important role in thrombosis and hemostasis. The specific sequence Arg-Gly-Asp (RGD) is critical for the binding of fibrinogen to platelet. To examine and characterize the GP IIb-IIIa antagonist from natural sources, we have developed a simple enzyme-linked immunosorbent assay (ELISA) system. The GP IIb-IIIa complex was purified to homogeneity from platelet lysates by the combination of two affinity chromatographic methods using the synthetic RGD peptide (GRGDSPI)-immobilized Sepharose and wheat germ lectin-Sepharose. The synthetic peptide GRGDSPI inhibits GP IIb-IIIa binding to immobilized fibrinogen with an IC₅₀ of 1.5 μM. Venoms of three different snake species and a Korean scorpion extract have strong antagonistic activities for the binding of human fibrinogen to the platelet GP IIb-IIIa complex. The IC₅₀ values of the snake venoms and scorpion were in the range of 5.5 μg to 60 μg. These results provide meaningful information for developing antiplatelet agents.
- 27/112 (Item 17 from file: 5) DIALOG(R)File 5:Biosis Preview(R) (c) 2004 BIOSIS. All its. reserv.
0010651733 BIOSIS NO.: 19979828793
Snake venom proteins modulating the interaction between von Willebrand factor and platelet glycoprotein Ib
AUTHOR: Fujimura Yoshihiro (Reprint); Kawasaki Tomihisa; Tani Kai
AUTHOR ADDRESS: Dep. Blood Transfusion, Nara Med. Univ., Kashihara, Nara 634, Japan** Japan
JOURNAL: Thrombosis and Haemostasis 76 (5): p633-639 1996 ISSN: 0340-6245
DOCUMENT TYPE: Article; Literature Review RECORD TYPE: Citation LANGUAGE: English
Publication date: 2004/01/01
- 27/1127 (Item 32 from file: 5) DIALOG(R)File 5:Biosis Preview(R) (c) 2004 BIOSIS. All its. reserv.
0007814019 BIOSIS NO.: 198192059790
IDENTIFICATION OF 50 KDa SNAKE VENOM PROTEINS WHICH SPECIFICALLY INHIBIT PLATELET ADHESION TO COLLAGEN
AUTHOR: SMITH J B (Reprint); DANGELMAIER C; SELAK M
AUTHOR ADDRESS: DEP PHARMACOLOGY, TEMPLE UNIVERSITY MEDICAL SCHOOL, 3400 NORTH BROAD STREET, PHILADELPHIA, PA 19140, USA** USA
JOURNAL: Febs Letters 283 (2-3): p307-310 1991 ISSN: 0014-5793 DOCUMENT TYPE: Article RECORD TYPE: Abstract
LANGUAGE: ENGLISH
ABSTRACT: Of 32 snake venoms tested, the crude venoms of four (Bothrops atrox, B. jararaca, Agkistrodon halys blomhoffii, and Crotalus basiliscus) showed strong inhibitor activity in an assay of platelet adhesion to collagen. Active 50 kDa proteins were purified to homogeneity from each venom and found to be rich in cysteine or amino acid analysis. A monoclonal antibody raised against the purified B. atrox protein crossreacted strongly with the 50 kDa proteins from B. jararaca and A. halys blomhoffii and weakly with the protein from C. basiliscus, indicating that all four proteins possess a similar epitope. The proteins inhibited platelet aggregation induced by collagen but not by other agonist.
- 27/1138 (Item 43 from file: 5) DIALOG(R)File 5:Biosis Preview(R) (c) 2004 BIOSIS. All its. reserv.
0003050734 BIOSIS NO.: 198070082221
STUDIES ON COAGULATION FIBRINOLYTIC ACTIVITY OF SNAKE VENOMS
AUTHOR: SAKURAGAWA N (Reprint); TAKAHASHI K; SHIBATA A; OHNISHI Y
AUTHOR ADDRESS: CLIN CENT LAB TOYAMA MED PHARM UNIV, TOYAMA, JPN** JAPAN
JOURNAL: Snake 11 (2): p176-183 1979 ISSN: 0386-3425 DOCUMENT TYPE: Article RECORD TYPE: Abstract
LANGUAGE: JAPANESE
ABSTRACT: Vipera russelli siamensis, Trimeresurus okinavensis, Naja naja kaouthia and Agkistrodon halys blomhoffii activated prothrombin via prothrombin-complex, but no thrombin-like activity was found in these snake venoms. T. okinavensis and Echis carinatus venom showed the strongest activities toward kaolin-rein. factor Xa, thrombin and plasmin. Fibrinolytic activity was found in the T. okinavensis, A. halys blomhoffii and T. flavoviridis. Platelet aggregation activity using [human] platelet rich plasma (PRP) was found in T. okinavensis (0.001 mg/ml), T. flavoviridis (0.01 mg/ml), A. halys blomhoffii (1 mg/ml) and E. carinatus venom (0.005 mg/ml). For coagulation-fibrinolytic inhibitors (antithrombin III, alpha 2-macroglobulin) and complements (C3 and C4), immunological assay methods were used. V. russelli siamensis, N. naja kaouthia, A. halys blomhoffii, T. flavoviridis and T. okinavensis venoms (0.01 mg/ml) strongly reduced alpha 2-macroglobulin and C3 and moderately reduced alpha 1-antitrypsin and C4. After snakebite coagulation-fibrinolysis is activated and platelet aggregation also occurs. These phenomena will induce disseminated intravascular coagulation. The characteristics of the snake venoms may be useful for coagulation-fibrinolysis investigation as an assay method.
- 8/6/1 (Item 1 from file: 15) 13354579 PMID: 9026474
Effects of ammonia and nitrate concentration on hematologic and serum biochemical profiles of hybrid striped bass (*Morone chrysops* x *Morone saxatilis*). Feb 1997
- 8/6/2 (Item 2 from file: 15) 13354578 PMID: 9026473
Effects of temperature on hematologic and serum biochemical profiles of hybrid striped bass (*Morone chrysops* x *Morone saxatilis*). Feb 1997
- 8/6/3 (Item 3 from file: 15) 11691720 PMID: 11864711
Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration. Jan 1 2002
- 8/6/4 (Item 1 from file: 5) 0014206479 BIOSIS NO.: 200300165198
The Novel Angiogenic Inhibitor Saxatilin Reduces Ocular Neovascularization Elicited by bFGF and Hypoxia. 2002
- 8/6/5 (Item 2 from file: 5) 0013636201 BIOSIS NO.: 200200229712
Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration. 2002
- 8/6/6 (Item 1 from file: 154) 13354579 PMID: 9026474,
Effects of ammonia and nitrate concentration on hematologic and serum biochemical profiles of hybrid striped bass (*Morone chrysops* x *Morone saxatilis*). Feb 1997
- 8/6/7 (Item 2 from file: 154) 13354578 PMID: 9026473
Effects of temperature on hematologic and serum biochemical profiles of hybrid striped bass (*Morone chrysops* x *Morone saxatilis*). Feb 1997
- 8/6/8 (Item 3 from file: 154) 11691720 PMID: 11864711
Snake venom disintegrin, saxatilin, inhibits platelet aggregation, human umbilical vein endothelial cell proliferation, and smooth muscle cell migration. Jan 1 2002
- 10/6/10 (Item 1 from file: 34) 13211768 Genuine Article#: 8595VE Number of References: 42
Title: Comparative proteomics and subtyping of venom phosphoproteases A(2) and disintegrins of *Protobothrops* pit vipers (ABSTRACT AVAILABLE)
Publication date: 2004/01/01
- 10/6/11 (Item 2 from file: 34) 13061303 Genuine Article#: 845KB Number of References: 61
Title: Crystal structure of schistatin, a disintegrin homodimer from saw-scaled viper (*Echis carinatus*) at 2.5 angstrom resolution (ABSTRACT AVAILABLE)
Publication date: 2004/01/01
- 10/6/12 (Item 3 from file: 34) 127118741 Genuine Article#: 813NMU Number of References: 85
Title: Intravenous injection of the snake venom disintegrin conotrostatin limits breast cancer progression (ABSTRACT AVAILABLE)
Publication date: 2004/01/01
- 10/6/14 (Item 4 from file: 34) 12620512 Genuine Article#: 8065X Number of References: 31
Title: Purpureolin: a novel disidicimic C-type lectin-like protein from *Trimeresurus purpureomaculatus* venom is stabilized by noncovalent interactions (ABSTRACT AVAILABLE)
Publication date: 2004/04/01
- 10/6/14 (Item 5 from file: 34) 12385533 Genuine Article#: 762DH Number of References: 41
Title: Venom phosphoproteases A(2) of bamboo viper (*Thimeresurus stejnegeri*): molecular characterization, geographic variations and evidence of multiple ancestries (ABSTRACT AVAILABLE)
Publication date: 2004/01/01
- 10/6/145 (Item 6 from file: 34) 12325263 Genuine Article#: 756JF Number of References: 44
Title: Structure of an acidic phosphoprotease A(2) from Indian saw-scaled viper (*Echis carinatus*) at 2.6 angstrom resolution reveals a novel intermolecular interaction (ABSTRACT AVAILABLE)
Publication date: 2004/01/01
- 10/6/146 (Item 7 from file: 34) 12278127 Genuine Article#: 748WM Number of References: 19
Title: Purification, partial characterization and crystallization of acutain, a protein containing both disintegrin-like and cysteine-rich domains released by auto-proteolysis of a PIII-type metalloproteinase AaH-IV from *Agkistrodon acutus* venom (ABSTRACT AVAILABLE)
Publication date: 2003/01/01
- 10/6/147 (Item 8 from file: 34) 12079286 Genuine Article#: 726AP Number of References: 38
Title: Crystal structure of trimesatin, a disintegrin containing a cell adhesion recognition motif RGD (ABSTRACT AVAILABLE)
Publication date: 2003/03/03
- 10/6/148 (Item 9 from file: 34) 12058259 Genuine Article#: 723GW Number of References: 54
Title: Amino acid sequence and crystal structure of BaP1, a metalloproteinase from *BaP*, a snake venom that exerts multiple tissue-damaging activities (ABSTRACT AVAILABLE)
Publication date: 2003/01/01
- 10/6/149 (Item 10 from file: 34) 11886732 Genuine Article#: 705VG Number of References: 46
Title: Myotoxicity induced by an acidic Asp-49 phospholipase A(2) isolated from *Lachesis muta* snake venom Comparison with lysophosphatidylcholine (ABSTRACT AVAILABLE)
Publication date: 2003/10/01
- 10/6/150 (Item 11 from file: 34) 11484071 Genuine Article#: 658BN Number of References: 37
Title: Geographic variations, cloning, and functional analyses of the venom acidic phospholipases A(2) of *Crotalus viridis* winds (ABSTRACT AVAILABLE)
Publication date: 2003/03/15

- Title: Expression and biochemical characterization of acidic phospholipase A(2) from *Agiistrodon acutus* (ABSTRACT AVAILABLE) Publication date: 19990300
- Title: Purification, crystallization and preliminary crystallographic analysis of AHP IXbp, a zinc ion and pH-dependent coagulation factor IX binding protein from *Agiistrodon halys* Pallas venom (ABSTRACT AVAILABLE) Publication date: 20030400
- Title: Purification, crystallization and preliminary X-ray analysis of the disintegrin cointrostain from *Agiistrodon constrictor* snake venom (ABSTRACT AVAILABLE) Publication date: 20021200
- Title: Lebecein, a C-peptide protein from the venom of *Macrovipera lebetina* that inhibits platelet aggregation and adhesion of cancerous cells (ABSTRACT AVAILABLE) Publication date: 20011050
- Title: Differential expression and geographic variation of the venom phospholipases A(2) of *Calloselasma rhodostoma* and *Trimeresurus macrurus* (ABSTRACT AVAILABLE) Publication date: 20010315
- Title: Identification of key residues responsible for enzymatic and platelet aggregation-inhibiting activities of acidic phospholipase A(2)s from *Agiistrodon halys* Pallas (ABSTRACT AVAILABLE) Publication date: 20010200
- Title: Phospholipases A(2) from *Calloselasma rhodostoma* venom gland - Cloning and sequencing of 10 of the cDNAs, three-dimensional modelling and chemical modification of the major isozyme (ABSTRACT AVAILABLE) Publication date: 20010100
- Title: Purification and characterization of a platelet agglutinating inhibiting protein (Agkisacutin) from *Agiistrodon acutus* venom (ABSTRACT AVAILABLE) Publication date: 2001100
- Title: Structural and functional characterization of hewigaease, a nonhemorrhagic fibrinogenolytic metalloprotease from *Bolitrops neuwiedi* snake venom (ABSTRACT AVAILABLE) Publication date: 20000915
- Title: Action of metalloproteinases mutalysin I and II on several-components of the hemostatic and fibrinolytic systems (ABSTRACT AVAILABLE) Publication date: 20000815
- Title: Purification, crystal growth and preliminary X-ray analysis of a phospholipase A(2) from venom of *Agiistrodon acutus* (ABSTRACT AVAILABLE) Publication date: 20000700
- Title: Confortostain, a dimeric disintegrin from *Agiistrodon constrictor* constrictor, inhibits breast cancer progression (ABSTRACT AVAILABLE) Publication date: 20000600
- Title: Characterization crystallization and preliminary X-ray diffraction analysis of acutahamoyisin, a haemolytic toxin from *Agiistrodon acutus* venom (ABSTRACT AVAILABLE) Publication date: 20000700
- Title: A comparative study of the function of phospholipases A(2) from *Agiistrodon acutus* (ABSTRACT AVAILABLE) Publication date: 20000400
- Title: Purification, cloning and sequence analyses for pro-metalloprotease-disintegrin variants from *Deinagkistrodon acutus* venom and subclassification of the small venom metalloproteinases (ABSTRACT AVAILABLE) Publication date: 20000300
- Title: Structures and pharmacological activities of phospholipase A(2S) from *Agiistrodon halys* Pallas (ABSTRACT AVAILABLE) Publication date: 20000200
- Title: Receptors for a growing family of secreted phospholipases A(2) (ABSTRACT AVAILABLE) Publication date: 19990400
- Title: Cloning, expression, and characterization of a cDNA encoding snake venom metalloprotease (ABSTRACT AVAILABLE) Publication date: 19990300
- Title: Haemorrhagic factors from snake venoms II. Structures of haemorrhagic factors and types and mechanisms of haemorrhage (ABSTRACT AVAILABLE) Publication date: 19980200
- Title: Snake venoms and the haemostatic system Publication date: 19981200
- Title: Acculin, a new disintegrin, inhibits angiogenesis *in vitro* and *in vivo* by acting as integrin alpha(v)beta(a)3 antagonist and inducing apoptosis (ABSTRACT AVAILABLE) Publication date: 19981101
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- Title: Haemorrhagic factors from snake venoms. I. Properties of haemorrhagic factors and antihaemorrhagic factors (ABSTRACT AVAILABLE) Publication date: 19980300
- Title: Biochemical characterization of lepetase, a direct-acting fibrinolytic enzyme from *Vipera lebetina* snake venom (ABSTRACT AVAILABLE) Publication date: 19980401
- Title: Analysis of cDNA sequence encoding a novel member of the snake venom metalloproteinase, disintegrin-like, cysteine-rich (MDC) protein family from *Agiistrodon constrictor laevis* (ABSTRACT AVAILABLE) Publication date: 19971017
- Title: Salmosin, a potent inhibitor of platelet aggregation from the venom of the viper, *Agiistrodon halys brevicaudus* (Korean salmosin) - Purification and molecular cloning of salmosin Publication date: 19970600
- Title: Salmostin, a novel platelet glycoprotein Ib binding protein from *Agiistrodon halys bromhoffii* Publication date:
- Title: Covalent attachment of an RGD-like peptide to create a potentially more effective thrombolytic agent (ABSTRACT AVAILABLE) Publication date: 19970801
- Title: XE998 Number of References: 0
- Title: VT0002 Number of References: 21
- Title: VT077 Number of References: 52
- Title: TR573 Number of References: 36
- Title: T231 Number of References: 53
- Title: CALLOSELASMIA-RHODOSTOMA (MALAYAN PIT VIPER) VENOM (Abstract Available)
- Title: TR562 Number of References: 32
- Title: TR537 Number of References: 38
- Title: AGKISTRODON HALYS PALLAS AT 2.0-ANGSTROM RESOLUTION (Abstract Available)
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- Title: PHOSPHOLIPASE A(2), MYOTOXINS FROM BOTHROPS SNAKE-VENOMS (Abstract Available)
- 10/6/189 (Item 50 from file: 34) 04289335 Genuine Article# RT886 Number of References: 4
- Title: MECHANISM OF INHIBITION OF PLATELET-AGGREGATION BY ACIDIC PHOSPHOLIPASE A(2) FROM AGKISTRODON HALYS PALLAS (Abstract Available)
- 10/6/190 (Item 51 from file: 34) 04140757 Genuine Article# RH353 Number of References: 207
- Title: INTERFACIAL ENZYMOLOGY OF GLYCEROLIPID HYDROLASES : LESSONS FROM SECRETED PHOSPHOLIPASES A(2) (Abstract Available)
- 10/6/191 (Item 52 from file: 34) 04124199 Genuine Article# RF680 Number of References: 21
- Title: PURIFICATION AND CHARACTERIZATION OF PISCIVORASE-I AND PISCIVORASE-II, THE FIBRINOLYTIC ENZYMES FROM EASTERN COTTONMOUTH MOCCASIN VENOM (AGKISTRODON PISCIVORUS-PISCIVORUS) (Abstract Available)
- 10/6/192 (Item 53 from file: 34) 04103633 Genuine Article# RER45 Number of References: 52
- Title: ENHANCEMENT OF AGKISTRODON-PISCIVORUS-PISCIVORUS VENOM PHOSPHOLIPASE A(2) ACTIVITY TOWARD PHOSPHATIDYLCHOLINE VESICLES BY LYSOLECITHIN AND PALMITIC ACID - STUDIES WITH FLUORESCENT-PROBES OF MEMBRANE-STRUCTURE (Abstract Available)
- 10/6/193 (Item 54 from file: 34) 04103106 Genuine Article# REG62 Number of References: 43
- Title: MOLECULAR CLONING AND SEQUENCE-ANALYSIS OF CONAS FOR METALLOPROTEINASES FROM BROAD-BANDED COPPERHEAD AGKISTRODON CONORTRIX LATINCUTUS (Abstract Available)
- 10/6/194 (Item 55 from file: 34) 04066346 Genuine Article# RB205 Number of References: 41
- Title: STRUCTURE OF A CALCIUM-INDEPENDENT PHOSPHOLIPASE-E-LIKE MYOTOXIC PROTEIN FROM BOTHROPS-ASPER VENOM (Abstract Available)
- 10/6/195 (Item 56 from file: 34) 04026331 Genuine Article# QZ913 Number of References: 39
- Title: CHEMICAL MODIFICATION AND INACTIVATION OF PHOSPHOLIPASES A(2) BY A MANGAOLIDE ANALOG (Abstract Available)
- 10/6/196 (Item 57 from file: 34) 03923517 Genuine Article# QT032 Number of References: 45
- Title: AUTOCATALYTIC ACYLATION OF PHOSPHOLIPASE-LIKE MYOTOXINS (Abstract Available)
- 10/6/197 (Item 58 from file: 34) 03878460 Genuine Article# QN338 Number of References: 42
- Title: BIOCHEMICAL-CHARACTERIZATION OF BASILASE, A FIBRINOLYTIC ENZYME FROM CROTALUS-BASILISCUS (Abstract Available)
- 10/6/198 (Item 59 from file: 34) 03762176 Genuine Article# QC586 Number of References: 27
- Title: PURIFICATION AND CHARACTERIZATION OF A NONHEMORRHAGIC METALLOPROTEASE FROM AGKISTRODON HALYS BREVICAUDUS VENOM (Abstract Available)
- 10/6/199 (Item 60 from file: 34) 03735355 Genuine Article# QB589 Number of References: 26
- Title: BINDING MODE OF PHOSPHOLIPASE A(2) WITH A NEW-TYPE OF PHOSPHOLIPID ANALOG HAVING AN OXAZOLIDINONE RING (Abstract Available)
- 10/6/200 (Item 61 from file: 34) 03622106 Genuine Article# PR286 Number of References: 46
- Title: THROMBOLYTIC EFFECTS OF RECOMBINANT FIBROLASE OR APSAC IN A CANINE MODEL OF CAROTID-ARTERY THROMBOSIS (Abstract Available)
- 10/6/201 (Item 62 from file: 34) 03440379 Genuine Article# PF791 Number of References: 36
- Title: CONORTROSTATIN, A SNAKE-VENOM DISINTEGRIN, INHIBITS BETA-1 INTEGRIN-MEDIATED HUMAN METASTATIC MELANOMA CELL-ADHESION AND BLOCKS EXPERIMENTAL METASTASIS (Abstract Available)
- 10/6/202 (Item 63 from file: 34) 03631945 Genuine Article# NZ786 Number of References: 179
- Title: HEMORRHAGIC METALLOPROTEINASES FROM SNAKE-VENOMS (Abstract Available)
- 10/6/203 (Item 64 from file: 34) 03251150 Genuine Article# NQ350 Number of References: 120
- Title: SNAKE-VENOMS AFFECTING THE HEMOSTATIC MECHANISM - A CONSIDERATION OF THEIR MECHANISMS, PRACTICAL APPLICATIONS AND BIOLOGICAL SIGNIFICANCE (Abstract Available)
- 10/6/204 (Item 65 from file: 34) 03093551 Genuine Article# NF042 Number of References: 70
- Title: INHIBITION OF HUMAN SECRETORY CLASS-II PHOSPHOLIPASE A(2) BY HEPARIN (Abstract Available)
- 10/6/205 (Item 66 from file: 34) 02955096 Genuine Article# MR685 Number of References: 25
- Title: PURIFICATION AND CHARACTERIZATION OF PLATELET AGGREGATION INHIBITORS FROM SNAKE VENOMS (Abstract Available)
- 10/6/206 (Item 67 from file: 34) 02813127 Genuine Article# MF533 Number of References: 6
- Title: EFFECT OF LEAVES OF GINKGO-BILOBA ON HAIR REGROWTH IN C3H STRAIN MICE (Abstract Available)
- 10/6/207 (Item 68 from file: 34) 02716542 Genuine Article# LY517 Number of References: 121
- Title: ACTION OF SNAKE-VENOM COMPONENTS ON THE HEMOSTATIC SYSTEM (Abstract Available)
- 10/6/208 (Item 69 from file: 34) 02701782 Genuine Article# LX335 Number of References: 26
- Title: MOLECULAR-CLONING AND SEQUENCE-ANALYSIS OF THE CONA FOR ANCROD, A THROMBIN-LIKE ENZYME FROM THE VENO OF CALLOSELASMIA-RHODOSTOMA (Abstract Available)
- 10/6/209 (Item 70 from file: 34) 02615432 Genuine Article# LP646 Number of References: 63
- Title: PLATELET ,ANTITHROMBIN, AND FIBRINOLYTIC-ACTIVITIES IN TAURINE-DEFICIENT AND TAURINE-REPLETIE CATS (Abstract Available)
- 10/6/210 (Item 71 from file: 34) 02404219 Genuine Article# KY879 Number of References: 36
- Title: BASIC PROTEINASES FROM BOTHROPS-MOGENI-(CAISSACA) VENOM. 1. ISOLATION AND ACTIVITY OF 2 SERINE PROTEINA MSP-1 AND MSP-2, ON SYNTHETIC-SUBSTRATES AND ON PLATELET AGGREGATION (Abstract Available)
- 10/6/211 (Item 72 from file: 34) 02301475 Genuine Article# KR509 Number of References: 34
- Title: ACCIDENTAL ENVENOMING BY A GABON VIPER (BITIS-GASCONICA) - THE HEMOSTATIC DISTURBANCES OBSERVED AND INVESTIGATION OF INVITRO HEMOSTATIC PROPERTIES OF WHOLE VENOM (Abstract Available)
- 10/6/212 (Item 73 from file: 34) 02250099 Genuine Article# KN544 Number of References: 88
- Title: EFFECT OF SOME ANIMAL VENOMS AND SECRETIONS ON THE HEMOSTATIC MECHANISM (Abstract Available)
- 10/6/213 (Item 74 from file: 34) 02100097 Genuine Article# KB012 Number of References: 237
- Title: MEMBRANE-STRUCTURE, TOXINS AND PHOSPHOLIPASE-A2 ACTIVITY (Abstract Available)
- 10/6/214 (Item 75 from file: 34) 02094892 Genuine Article# KA580 Number of References: 39
- Title: EXPRESSION OF A GROUP-II PHOSPHOLIPASE-A2 FROM THE VENOM OF AGKISTRODON PISCIVORUS-PISCIVORUS IN ESCHERICHIA-COLI - RECOVERY AND RENATURATION FROM BACTERIAL INCLUSION-BODIES
- 10/6/215 (Item 76 from file: 34) 02018678 Genuine Article# JV011 Number of References: 36
- Title: CALCIUM AND MAGNESIUM DEPENDENCE OF PHOSPHATIDYLCHOLINE SMALL UNILAMELLAR VESICLES (Abstract Available)
- 10/6/216 (Item 77 from file: 34) 01944760 Genuine Article# JN565 Number of References: 0
- Title: PRELIMINARY CRYSTALLOGRAPHIC STUDY OF THE PLATELET AGGREGATION INHIBITOR FROM THE VENOM OF AGKISTRODON-HALYS-PALLAS
- 10/6/217 (Item 78 from file: 34) 01935522 Genuine Article# JN464 Number of References: 201
- Title: CHARACTERIZATION OF SNAKE-VENOM COMPONENTS ACTING ON BLOOD-COAGULATION AND PLATELET-FUNCTION (Abstract Available)
- 10/6/218 (Item 79 from file: 34) 01876154 Genuine Article# JH548 Number of References: 39
- Title: REVERSIBILITY OF THE ACTIVATION OF SOLUBLE PHOSPHOLIPASE-A2 ON LIPID BILAYERS - IMPLICATIONS FOR THE ACTIVATION MECHANISM (Abstract Available)
- 10/6/219 (Item 80 from file: 34) 01815168 Genuine Article# JD342 Number of References: 57
- Title: IMMUNOCHEMICAL ANALYSIS OF A SNAKE-VENOM PHOSPHOLIPASE-A2 NEUROTOXIN, CROTOKIN, WITH MONOCLONAL-ANTIBODIES (Abstract Available)
- 10/6/220 (Item 81 from file: 34) 01736523 Genuine Article# HX769 Number of References: 32
- Title: MOLECULAR DETAILS OF THE ACTIVATION OF SOLUBLE PHOSPHOLIPASE-A2 ON LIPID BILAYERS - COMPARISON OF COMPUTER-SIMULATIONS WITH EXPERIMENTAL RESULTS (Abstract Available)
- 10/6/221 (Item 82 from file: 34) 01681418 Genuine Article# HR719 Number of References: 127
- Title: STRUCTURAL DOMAINS IN VENOM PROTEINS - EVIDENCE THAT METALLOPROTEINASES AND NONENZYMIC PLATELET-AGGREGATION INHIBITORS (DISINTEGRINS) FROM SNAKE-VENOMS ARE DERIVED BY PROTEOLYSIS FROM A COMMON PRECURSOR (Abstract Available)
- 10/6/222 (Item 83 from file: 34) 01651867 Genuine Article# HP168 Number of References: 15
- Title: STRUCTURE OF ACIDIC PHOSPHOLIPASE-A2 FOR THE VENOM OF AGKISTRODON -HALYS-BLOHMHOFFI AT 2.8 Å RESOLUTION (Abstract Available)
- 10/6/223 (Item 84 from file: 34) 01487020 Genuine Article# HC507 Number of References: 44
- Title: KINETICS OF THE HYDROLYSIS OF MICELLAR SUBSTRATES CATALYZED BY SNAKE-VENOM PHOSPHOLIPASES-A2 (Abstract Available)
- 10/6/224 (Item 85 from file: 34) 01223003 Genuine Article# GF445 Number of References: 39
- Title: PLATELET -DERIVED MICROPARTICLES EXPRESS HIGH-AFFINITY RECEPTORS FOR FACTOR-VIII (Abstract Available)
- 10/6/225 (Item 86 from file: 34) 01154827 Genuine Article# GA940 Number of References: 25
- Title: HIGHLY SEQUENTIAL BINDING OF PROTEIN-KINASE-C AND RELATED PROTEINS TO MEMBRANES (Abstract Available)
- 10/6/226 (Item 87 from file: 34) 01154826 Genuine Article# GA940 Number of References: 43
- Title: EXTENSIVE SEGREGATION OF ACIDIC PHOSPHOLIPIDS IN MEMBRANES INDUCED BY PROTEIN-KINASE-C AND RELATED PROTEINS (Abstract Available)

- 10/6/227 (Item 88 from file: 34) 01093535 Genuine Article# FW548 Number of References: 40 Title: PURIFICATION AND CHARACTERIZATION OF A PHOSPHOLIPASE FROM VIPERA-LEBETINA (DESSERT ADDER) VENOM (Abstract Available)
- 10/6/228 (Item 89 from file: 34) 01073100 Genuine Article# FU407 Number of References: 68 Title: PEPTIDES THAT MIMIC THE PSEUDOSUBSTRATE REGION OF PROTEIN-KINASE-C BIND TO ACIDIC LIPIDS IN MEMBRANES (Abstract Available)
- 10/6/229 (Item 90 from file: 34) 00929942 Genuine Article# FG608 Number of References: 72 Title: ANALYSIS OF CDNA'S ENCODING THE 2 SUBUNITS OF CROTOKIN A. PHOSPHOLIPASE-A2 NEUROTOXIN FROM RATTLESNAKE VENOM - THE ACIDIC N- ENZYMATIC SUBUNIT DERIVES FROM A PHOSPHOLIPASE-A2-LIKE PRECURSOR (Abstract Available)
- 10/6/230 (Item 91 from file: 34) 00807533 Genuine Article# FE825 Number of References: 139 Title: EFFECTS OF SNAKE-VENOMS ON HEMOSTASIS (Abstract Available)
- 10/6/231 (Item 92 from file: 34) 00793839 Genuine Article# EX558 Number of References: 29 Title: MODULATION OF TISSUE PLASMINOGEN-ACTIVATOR BIOSYNTHESIS BY PHOSPHATIDYLINOSITOL LIPOSOMES IN HUMAN FETAL LUNG HIBROBLASTS
- 10/6/232 (Item 93 from file: 34) 00756237 Genuine Article# EV178 Number of References: 36 Title: PROTEINS THAT BIND CALCIUM IN A PHOSPHOLIPID-DEPENDENT MANNER
- 10/6/233 (Item 94 from file: 34) 00745331 Genuine Article# ER887 Number of References: 26 Title: TRANSLOCATION OF CA-2+ ACROSS LIPID BILAYER-MEMBRANE DUE TO DEFECTS INDUCED BY TELEOCIDIN (Abstract Available)
- 10/6/234 (Item 95 from file: 34) 00716124 Genuine Article# EQ046 Number of References: 36 Title: INHIBITION OF PANCREATIC PHOSPHOLIPASE-A2 ACTIVITY BY UTEROGLOBIN AND ANTIFLAMMIN PEPTIDES - POSSIBLE MECHANISM OF ACTION (Abstract Available)
- 10/7/173 (Item 34 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 0726908 Genuine Article# 143YH Number of References: 93 Title: Haemorrhagic factors from snake venoms II. Structures of haemorrhagic factors and types and mechanisms of haemorrhage
- Authors(s): Mashiko H (REPRINT), Takahashi H Corporate Source: MEIJI COLLEGE OF PHARMACY, SETAGAYA KU, 1-35-23 NOZAWA/TOKYO 154/JAPAN (REPRINT) Journal: JOURNAL OF TOXICOLOGY-TOXIN REVIEWS, 1998, V17, N4 P483-512 ISSN: 0731-3831 Publication date: 1998-08-0000 Publisher: MARCEL DEKKER INC, 270 MADISON AVE, NEW YORK, NY 10016 Language: English Document Type: ARTICLE Abstract: It was revealed that almost all snake venom haemorrhagic factors (HFs) are metalloproteinases. Analysis of primary structures of HFs revealed that they share multi-domain structures. And they are divided into four major classes. These HFs damaged the micro blood vessel walls and cause local haemorrhage. Some HFs cause systemic, organ specific and species specific haemorrhage. This review describes the structures of HFs and autoproteolysis of HFs. Types and mechanisms of haemorrhage caused by HFs are also described.
- 10/7/174 (Item 35 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 07229442 Genuine Article# 139BC Number of References: 302 Title: Snake venoms and the hemostatic system
- Authors(s): Markland FS (REPRINT) Corporate Source: UNIV SO CALIF SCH MED, CANC RES LAB 106, 1303 N MISSION RD/LOS ANGELES/CA90033 (REPRINT) Journal: TOXICON, 1998, V36, N12 (DEC) P1749-1800 ISSN: 0041-0101 Publication date: 1998-12-00 Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND Language: English Document Type: REVIEW
- 10/7/180 (Item 41 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 06244724 Genuine Article# YE170 Number of References: 48 Title: Snake venoms
- Authors(s): Markland FS (REPRINT) Corporate Source: UNIV SO CALIF SCH MED, CANC RES LAB 106, 1303 N MISSION RD/LOS ANGELES/CA90033 (REPRINT) Journal: DRUGS, 1997, V54, 3 P1-10 ISSN: 0012-6657 Publication date: 1997-0000 Publisher: ADIS INTERNATIONAL LTD, 41 CENTURIAN DR, PRIVATE BAG 65901, MAIRANGI BAY, AUCKLAND 10, NEW ZEALAND Language: English Document Type: ARTICLE Abstract: Snake venoms are complex mixtures containing many different biologically active proteins and peptides. A number of these proteins act on components of the haemostatic system in humans. The paper focuses on those venom constituents that affect the blood coagulation pathway, endothelial cells and platelets. Several highly purified venom enzymes have been used clinically as anticoagulants, and other venom proteins are being used in preclinical research to investigate their possible therapeutic potential.
- Haemostatically active components are distributed widely in the venom of many different snake species. In no case are all the components described below found in any single venom. Venom components can be grouped into several categories depending on their haemostatic effect. The following haemostatically active components are discussed in this chapter: enzymes that cause fibrinogen coagulation; enzymes that degrade fibrinogen; plasminogen activators; prothrombin activators; factor V activator; factor X activator; anticoagulant activities; enzymes with haemorrhagic activity; platelet aggregation inducers; and platelet aggregation inhibitors.
- 10/7/203 (Item 64 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 03251150 Genuine Article# NQ350 Number of References: 120 Title: SNAKE-VENOMS AFFECTING THE HEMOSTATIC MECHANISM - A CONSIDERATION OF THEIR MECHANISMS, PRACTICAL APPLICATIONS AND BIOLOGICAL SIGNIFICANCE
- Author(s): MARSH NA Corporate Source: QUEENSLAND UNIV TECHNOL, SCH LIFE SCI 2 GEORGE ST,GPO BOX 2434/BRI/SEANE/QLD 4001/AUSTRALIA/
- Journal: BLOOD COAGULATION & FIBRINOLYSIS, 1994, V5, N3 (JUN) P399-410 ISSN: 0957-5235 Language: ENGLISH Document Type: REVIEW
- Abstract: Snake venoms contain a rich variety of factors affecting the haemostatic mechanism which can be broadly classified possessing coagulant, anticoagulant and haemorrhagic activity. Coagulant enzymes include activators of blood coagulation factors II (prothrombin), V and X; antiocoagulants include protein C activators, inhibitors of prothrombin complex formation; and fibrinogenases which can be further classified according to their specificity for the alpha-, beta- and gamma-chains of fibrinogen. Intermediate between true coagulants and true antiocoagulants are the thrombin-like enzymes which bring about clotting in vitro but defibrination (anticoagulation). In vivo, Snake venoms also affect platelets either by inducing or inhibiting platelet aggregation and cause haemorrhage via an action on platelets or via proteolysis of the blood vessel wall. Haemorrhagens also include inter alia, the alpha-fibrinogenases. This rich diversity of snake venom components affecting haemostasis has enabled a range of practical applications to be established including therapeutic anticoagulation with thrombin-like enzymes (Androct and Defibra and laboratory tests for individual haemostatic factors (protein C, prothrombin, factor X and lupus anticoagulant). This broad spectrum of materials in snake venoms suggests some evolutionary advantage to the venom producer, not only for dispatching prey but as agents which spread the venom toxins throughout the body and initiate digestion. \
- 10/7/205 (Item 66 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 02953096 Genuine Article# MRS85 Number of References: 25 Title: PURIFICATION AND CHARACTERIZATION OF PLATELET AGGREGATION INHIBITORS FROM SNAKE VENOMS Author(s): TRIKHA M, ROTE WE, MANLEY PJ, LUCCHESI BR, MARKLAND FS Corporate Source: UNIV SO CALIF, SCH MED DEPT BIOCHEM & MOLEC BIOL,CRL 106/LOS ANGELES/CA90033; UNIV CALIF, SCH MED DEPT BIOCHEM & MOLEC BIOL/LOS ANGELES/CA90033; UNIV MICHIGAN,SCH MED,DEPT PHARMACOL NN ARBOR/MI48109
- Journal: THROMBOSIS RESEARCH, 1994, V73, N1 (JAN 1), P39-52 ISSN: 0049-3848 Language: ENGLISH Document Type: ARTICLE
- Abstract: Proteins that inhibit glycoprotein (GP) IIIa mediated platelet aggregation have been purified from the venom of two snake species. A small platelet aggregation inhibitor (p.IAI), multisquamatin (Mr=5,700), was purified from Echis multiscutatum venom by hydrophobic interaction HPLC and two steps on C18 reverse phase HPLC. A larger p.IAI, contortostatin (Mr=15,000) was purified by a similar HPLC procedure from the venom of *Akistodon contortrix* contortrix. Both p.IAIs inhibit ADP-induced human, canine and rabbit platelet aggregation using platelet rich plasma (PRP). Multisquamatin has an IC50 of 97 nM, 281 nM and 333 nM for human, canine and rabbit PRP, respectively. Contortostatin has an IC50 of 49 nM, 120 nM and 1150 nM for human, canine, rabbit PRP, respectively. In a competitive binding assay using 1-125-I-TS3 (a monoclonal antibody to GPIIb/IIIa t inhibits platelet aggregation) both contortostatin and multisquamatin demonstrated GPIIb/IIIa specific binding to human and canine platelets. The IC50 for contortostatin displacement of TS3 binding to human and canine GPIIb/IIIa is 27 nM and 16 nM respectively and for multisquamatin it is 3 nM and 63 nM, respectively. Our results indicate that both p.IAIs inhibit platelet aggregation by binding with high affinity to GPIIb/IIIa.
- 10/7/207 (Item 68 from file: 34) DIALOG(R)File 34 SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv.
- 02716642 Genuine Article# LY517 Number of References: 121 Title: ACTION OF SNAKE-VENOM COMPONENTS ON THE HEMOSTATIC SYSTEM
- Author(s): HUTTON RA, WARRELL DA Corporate Source: JOHN RADCLIFFE HOSP/NUFFIELD DEPT CLIN MED/OXFORD OX3 9DU/ENGLAND; JOHN RADCLIFFE HOSP/NUFFIELD DEPT CLIN MED/OXFORD OX3 9DU/ENGLAND; ROYAL FREE HOSP,CTR HAEMOPHILIA/LONDON/ENGLAND; UNIV LONDON SCH MED/LONDON/ENGLAND; ROYAL FREE HOSP,DEPT HAEMATOL/HAEMOSTASIS UNIT/LONDON/ENGLAND
- Journal: BLOOD REVIEWS, 1993, V7, N3 (SEP), P176-189 ISSN: 0268-960X Language: ENGLISH Document Type: REVIEW Abstract: Among the components in snake venom are a number which have profound effects (either stimulatory or inhibitory) o

relationships of several related proteins, and influence the synthesis of recombinant disintegrins, metalloproteinases and relate polypeptides.

haemostatic mechanisms, including coagulation, fibrinolysis, platelet function and vascular integrity. As a consequence, human victims of snakebite may suffer severe and sometimes fatal haemorrhagic and/or thrombotic sequelae. Many of these venom components have been isolated and their precise mechanisms of action established. Apart from direct fibrinolysis, procoagulants predominate, most of these exerting their effect late in the clotting cascade, activating factor X or prothrombin or directly converting fibrinogen to fibrin. Some of the procoagulants are, or have the potential to be, used as therapeutic agents.

Some venom components have been put to use as laboratory reagents for diagnostic purposes or for characterising molecular defects of haemostasis, although because they often have unphysiological actions, results must be interpreted with caution. These and other useful constituents e.g. protein C activator and platelet aggregating agents are discussed.

10/7/212 (Item 73 from file: 34) DIALOG(R)File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv. 02250099 Genuine Article# KN544 Number of References: 88 Title: EFFECT OF SOME ANIMAL VENOMS AND SECRETIONS ON THE HEMOSTATIC MECHANISM Authors(s): MARVAL E, AROCHA PINANGO CL Corporate Source: CENI UNIV VENEZUELA,FAC MED/ESCUELA BIOANAL/CARACAS/VENEZUELA/; IVIC,CTR MED EXP/LUGARACAS 1020A/VENEZUELA Journal: INTERCIENCIA, 1993, V18, N1 (JAN-FEB), P10-15 ISSN: 0378-1844 Language: SPANISH Document Type: ARTICLE Abstract: The venoms and secretions from some animals contain substances which act on the hemostatic mechanism, activating or inhibiting the coagulation pathways or activating the fibrinolytic system. The venoms of snakes are the best known and several enzymes which act on different steps of the cascade have been identified, for example the venoms of the genera Bothrops and Agkistrodons that have thrombin-like enzymes; Notechis Scutatus and Oxyuranus Scutellatus that act on the prothrombin, only in its carboxylated form the first, and with the aid of Factor V the second. In the saliva of vampire bats Desmodus rotundus and Desmodus rugosus a plasminogen activator has been identified. Invertebrates also have substances that act on the hemostatic system: the leeches Hirudo medicinalis have antithrombin activity, the Hemementia ghilianii fibrinolytic activity and a platelet aggregation inhibitor. Spiders such as Loxosceles reclusa, produce disseminated intravascular coagulation and the caterpillars of the Lonomia achelous, A. Satuniniidae widely, distributed in South America, induces a severe bleeding disorder in humans. Fibrinolytic activities (direct and plasminogen activator) have been identified in their biological fluids as well as prothrombin and Factor V activator in addition to a Factor XIII inhibitor. The understanding of the mechanism of action of some of these venoms has been very useful in the production of diagnostic reagents, for assays of Prothrombin, Factor X, Protein C, Fibrinogen and therapeutic drugs (Hirudin, Bathroxbin, Anchrod) as well as to better learn of their physiological pathways.

10/7/217 (Item 78 from file: 34) DIALOG(R)File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv. 01939552 Genuine Article# JN464 Number of References: 201 Title: CHARACTERIZATION OF SNAKE-VENOM COMPONENTS ACTING ON BLOOD-COAGULATION AND PLATELET - FUNCTION Authors(s): OUYANG C, TENG CM; HUANG TF Corporate Source: NATL TAIWAN UNIV,COLL MED,DEPT PHARMACOL/TAIPEI10018/TAIWAN Journal: TOXICON, 1992, V30, N9 (SEP), P945-956 ISSN: 0041-0101 Language: ENGLISH Document Type: REVIEW Abstract: Snake venoms can affect blood coagulation and platelet function in various ways. The physicochemical properties and the mechanisms of actions of the snake venom components affecting blood coagulation and platelet function are discussed.

10/7/221 (Item 82 from file: 34) DIALOG(R)File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv. 01681418 Genuine Article# HR719 Number of References: 127 Title: STRUCTURAL DOMAINS IN VENOM PROTEINS - EVIDENCE THAT METALLOPROTEINASES AND NONENZYMATIC PLATELET AGGREGATION INHIBITORS (DISINTEGRINS) FROM SNAKE-VENOMS ARE DERIVED BY PROTEOLYSIS FROM A COMMON PRECURSOR Authors(s): KINI RM; EVANS HJ Corporate Source: VIRGINIA COMMONWEALTH UNIV,MED COLL VIRGINIA,DEPT BIOCHEM & MOLECULAR PHYS/RICHMOND /VA/23298 Journal: TOXICON, 1992, V30, N3 (MAR), P285-293 Language: ENGLISH Document Type: REVIEW

Abstract: A comparison of the structures of a precursor of trigramin (a disintegrin), metalloproteinases, disintegrins and related proteins, suggests the existence of common precursors for metalloproteinases and disintegrins. The proposed common precursor and related proteins have four distinct domains (A-D). Domain B contains the metal binding site and the catalytic Glu residue, which comprise the active site of metalloproteinases. Domain C contains the Arg-Gly-Asp sequence and hence the ability to inhibit the activity of integrins. Domains A and D are unique and their biochemical or biological activity is unknown. The proposed precursor can be proteolytically cleaved at several interdomain sites, releasing the disintegrins and metalloproteinases. A survey of more than 100 venom metalloproteinases and disintegrins strongly supports the existence of precursor proteins and their structural domains. This is also upheld by the co-occurrence of metalloproteinases and disintegrins in the venoms of several genera of crotalid and viperid snakes. The likelihood of intradomain disulfide bridges, and accessibility of all interdomain cleavage sites also supports our contention. The susceptibility of the cleavage sites appears to be determined by nearby disulfide bridges and glycosylation. Recognition of the proposed structural domains of venom proteinases should help clarify the structure-function relationships of several related proteins, and influence the synthesis of recombinant disintegrins, metalloproteinases and relate polypeptides.

10/7/230 (Item 91 from file: 34) DIALOG(R)File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All its. reserv. 00907533 Genuine Article# FE925 Number of References: 139 Title: EFFECTS OF SNAKE-VENOMS ON HEMOSTASIS Authors(s): MEIER J; STOCKER K Corporate Source: PENTAPHARM LTD,DEPT BIOL,ENGELGASSE 109/CH-4002BASEL/SWITZERLAND/; PENTAPHARM LTD,RES & DEV/CH-4002 BASEL/SWITZERLAND/

Journal: CRITICAL REVIEWS IN TOXICOLOGY, 1991, V21, N3, P171-182 Language: ENGLISH Document Type: REVIEW Abstract: Proteins found in venoms, especially of the Viperidae snake family, exert often with a narrow specificity, activating, inactivating, or other converting effects on different components of the hemostatic and fibrinolytic systems, respectively. Some purified snake venom proteins have become valuable tools in basic research and in diagnostic procedures in hemostaseology "Procoagulant" as well as "anticoagulant" venom components have been identified in vitro test systems. "Procoagulant" snake venom components may cause in vivo, upon massive application as in the case of snake-bite of small prey animals, intravascular coagulation leading to circulatory arrest and rapid death. Smaller doses of procoagulant venom components applied to large organisms as in the case of snake-bite accidents in humans, may cause a consumptive coagulopathy with localized or generalized bleeding. Highly purified, specific fibrinogen coagulant venom proteinases are used in human medicine to produce therapeutic fibrinogenation. These practically nontoxic venom enzymes may act synergistically with other components aggravating their toxic effects.

17/6/1 (Item 1 from file: 155) 16640847 PMID: 14646104 Purification, partial characterization and crystallization of acucainin, a protein containing both disintegrin-like and cysteine-rich domains released by auto-proteolysis of a PII-type metalloproteinase NaH-IV from Agkistrodon acutus venom. Dec 2003

17/6/2 (Item 2 from file: 155) 16113331 PMID: 15041797 Anti-angiogenic activity of contortrostatin, a disintegrin from Agkistrodon contortrix contortrix snake venom. 2003 17/6/3 (Item 3 from file: 155) 14299771 PMID: 10204708 Cbrin, expression, and characterization of a cDNA encoding snake venom metalloproteinase. Mar 1999

17/6/4 (Item 4 from file: 155) 13697372 PMID: 9392519 Analysis of a cDNA sequence encoding a novel member of the snake venom metalloproteinase, disintegrin-like, cysteine-rich (MDC) protein family from Agkistrodon contortrix laticinctus. Oct 17 1997

17/6/5 (Item 5 from file: 155) 13023949 PMID: 8694817 cDNA cloning and deduced amino acid sequence of fibrinolytic enzyme (lebtase) from Vipera libetina snake venom. Jul 5 1996

17/6/6 (Item 6 from file: 155) 12663299 PMID: 7739374 Molecular cloning and sequence analysis of cDNAs for metalloproteinases from broad-banded copperhead Agkistrodon contortrix laticinctus. Jun 1995

17/6/7 (Item 7 from file: 155) 12509220 PMID: 14517425 Contortrostatin, a dimeric disintegrin from Agkistrodon contortrix contortrix, inhibits angiogenesis. 1999

17/6/8 (Item 8 from file: 155) 12264706 PMID: 12815662 The snake venom disintegrin salmosin induces apoptosis by disassembly of focal adhesions in bovine capillary endothelial cells. Mar 14 2003

17/6/9 (Item 9 from file: 155) 12122827 PMID: 12454747 Purification, crystallization and preliminary X-ray analysis of the disintegrin contortrostatin from Agkistrodon contortrix contortrix snake venom. D 2002

17/6/10 (Item 10 from file: 155) 11732363 PMID: 119-0184 A novel snake venom disintegrin that inhibits human ovarian cancer dissemination and angiogenesis in an orthotopic nude mouse model. May-0 2001

17/6/11 (Item 11 from file: 155) 10835276 PMID: 10966001 Contortrostatin, a dimeric disintegrin from Agkistrodon contortrix contortrix, inhibits breast cancer progression. Jun 2000

17/6/12 (Item 12 from file: 155) 10829700 PMID: 10944600 Suppressive mechanism of salmosin, a novel disintegrin in B16 melanoma cell metastasis. Aug 18 2000

17/6/13 (Item 13 from file: 155) 10585282 PMID: 10619173 Purification, cloning and sequence analyses for pro-metalloproteinase-disintegrin variants from *Dendrolycus acutus* venom and subclassification of the small venom metalloproteinases. Mar 2000

17/6/14 (Item 14 from file: 155) 10523713 PMID: 10623623 Contortrostatin, a homodimeric disintegrin , binds to integrin alphabeta5. Jan 7 2000

17/6/15 (Item 15 from file: 155) 10182439 PMID: 7520832
Contortrostatin, a snake venom disintegrin , inhibits beta 1 integrin-mediated human metastatic melanoma cell adhesion and blocks experimental metastasis. Sep 15 1994

17/6/16 (Item 1 from file: 5) 0014236230 BIOSIS NO.: 200300196949
Anti-tumor agent comprising salmosin as an active ingredient 2003

17/6/17 (Item 2 from file: 5) 0012650199 BIOSIS NO.: 200000368512
Salmosin, a novel disintegrin , suppresses tumor metastasis in mice 2000

17/6/18 (Item 3 from file: 5) 0011666310 BIOSIS NO.: 199800460557
Cloning, expression and sequence analysis of a new metalloproteinase/ disintegrin from *Agkistrodon contortrix laticinctus* 1998

17/6/19 (Item 4 from file: 5) 0010342856 BIOSIS NO.: 199698810689
Inhibitory effects of snake venom proteins on the binding of breast cancer cells to extracellular matrix components 1996

17/6/20 (Item 5 from file: 5) 0009907686 BIOSIS NO.: 199598375629
Molecular cloning and sequence analysis of cDNAs for metalloproteinases from broad-banded copperhead *Agkistrodon contortrix laticinctus* 1995

17/6/21 (Item 6 from file: 5) 0009644715 BIOSIS NO.: 199538112548
A snake venom disintegrin that inhibits beta 1 integrin-mediated human metastatic melanoma cell adhesion, and blocks experimental metastasis 1994

17/6/22 (Item 1 from file: 34) 08852852 Genuine Article# 336TQ Number of References: 15
Title: Molecular cloning and sequence analysis of cDNA encoding actophysin C, a hemorrhagic metalloproteinase, from *Agkistrodon acutus* (ABSTRACT AVAILABLE) Publication date: 2000/07/00

17/7/10 (Item 10 from file: 155) DIALOG(R)File 155: MEDLINE(R) (c) format only 2004 The Dialog Corp. All rights reserved.

1173283 PMID: 11910184
A novel snake venom disintegrin that inhibits human ovarian cancer dissemination and angiogenesis in an orthotopic nude mouse model

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Haemostasis (Switzerland) May-Dec 2001; 31 (3-6): p183-91 ISSN 0301-0147 Journal Code: 0371574 Document type:
Journal Article Languages: English Main Citation Owner: NLM Record type: Completed
OVCAR-5 is a human epithelial carcinoma cell line of the ovary, established from the ascitic fluid of a patient with progressive ovarian adenocarcinoma without prior cytotoxic treatment. The unique growth pattern of ovarian carcinoma makes it an ideal model for examining the anticancer activity of contortrostatin (CN), a homodimeric disintegrin from southern copperhead venom. FACS analysis revealed that OVCAR-5 is integrin alpha1/beta3 negative, but alpha1/beta5 positive. CN effectively blocks the adhesion of OVCAR-5 cells to several extracellular matrix proteins and inhibits tumor cell invasion through an artificial basement membrane. In a xenograft nude mouse model with intraperitoneal introduction of OVCAR-5 cells, intraperitoneal injection of CN was used for therapy. Tumor dissemination in CN-treated versus control groups was studied by gross examination, and antangiogenic potential was examined by factor VII immunohistochemistry and image analysis. CN not only significantly inhibited ovarian cancer dissemination in the nude mouse model, but it also dramatically prevented the recruitment of blood vessels to tumors at secondary sites. Copyright 2002 S. Karger AG, Basel Record Date Created: 20020322 Record Date Completed: 20030902